

Tasmanian Year Book



1983

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TASMANIAN YEAR BOOK
1983

Frontispiece: Rainforest, Mersey Valley
(Tasmanian Government Stills Photographic Section)



**AUSTRALIAN BUREAU OF STATISTICS
TASMANIAN OFFICE**



TASMANIAN YEAR BOOK

No. 17: 1983

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SYMBOLS AND OTHER USAGES

The following symbols, where used, mean:

ASIC	Australian Standard Industrial Classification
n.a.	not available
n.e.c.	not elsewhere classified
n.e.i.	not elsewhere included
n.p.	not available for separate publication but included in totals where applicable
n.y.a.	not yet available
p	preliminary—figure or series subject to revision
r	figure or series revised since previous issue
..	not applicable
—	nil or rounded to zero
— —	break in continuity of the series (where drawn across a column between two consecutive figures)
(H)	located in Hobart Statistical Division
(S)	located in Southern Statistical Division
(H) (S)	parts in both Divisions.

Where figures have been rounded, discrepancies may occur between sums of the component items and totals.

Where reference is made to Acts of the Federal or State Parliaments, the year quoted refers to the year in which the principal Act was passed; all subsequent amendments are inferred.

VALUES AND MEASURES

Values are shown in Australian dollars (\$) and/or cents (¢): Metric units have been substituted for imperial units. The use of dollar currency and metric units has not been confined merely to tables; for the sake of uniformity, they have also been introduced into historical texts. See Appendix B for metric conversion factors.

LOCAL NAMES OF CERTAIN REGIONS

Tasmanians describe certain regions in a manner confusing to strangers; nevertheless this book employs local usage in most contexts. The chief peculiarities are:

North-West Coast: The *north* coast from approximately Port Sorell, west to Cape Grim is called the *North-West Coast*.

North-East Coast: The *north* coast from approximately Low Head, east to Cape Portland is called the *North-East Coast*. With most of the north coast referred to as either 'north-west' or 'north-east', the term 'north' is rarely applied to this coastal region.

West Coast: The Tasmanian *West Coast* may also refer only to the mining settlements of Queenstown, Rosebery, etc. In other contexts, the user may be thinking of inland mountains and rainforests rather than of a coastline.

Midlands: The true *Midlands* are probably the Central Plateau but the Tasmanian term means the rural area east of the Plateau and lying along the axis of the Hobart-Launceston road (the *Midland Highway*).

PREFACE

The *Tasmanian Year Book* is designed to present a comprehensive statistical and descriptive account of the physical environment and of the social, demographic and economic structure of the State, with particular emphasis on change and development in more recent years. In providing a general description of Tasmania, the *Year Book* includes authoritative information on almost every aspect of life in the State. The text and tables are supplemented by numerous maps, graphs and diagrams.

This edition of the *Year Book* (the seventeenth) includes special articles on: Tasmania's Legislative Council by Dr Ralph Chapman; tourism in Tasmania by Mr Paul Tapp; and a continuing commentary on the controversial Gordon-below-Franklin Power Scheme.

An index of special articles precedes the General Index and covers all such articles included in this and previous issues of the *Year Book*.

As far as possible, the latest available statistics and significant developments which occurred during 1982 have been embodied in each chapter.

The *Year Book* has been compiled under the direction of Mr R. S. White, J.P., B.A., M.A.C.S.; Mr C. C. Johnston, B.A. was responsible for editing this issue.

I gratefully acknowledge the valuable assistance given by officers of the various Federal and State Government Departments and instrumentalities and by others who have contributed information. I also express my appreciation to Valentine Photocomposition Services and Valentine Graphics for their co-operation and enthusiasm in producing this *Year Book*.

Special thanks are due to the Commonwealth, State and local government authorities, private organisations, farmers and graziers and others who have supplied the basic data from which the statistics of the State have been compiled.

More detailed, and in many cases more up-to-date, statistics relating to most matters treated in the *Year Book* are available in the other statistical publications issued by the ABS. Information about ABS publications relating to Tasmania is provided in the section 'Publication of Tasmanian Statistics' which precedes the Index of Special Articles. In addition, unpublished statistics may be available on request. At the end of each chapter, a list of 'Further References' relevant to the subject matter of the chapter is included.

The Tasmanian Office maintains an Information Service which, on request, supplies available statistical information and publications. All publications of the ABS and other statistical material are included in the Office Library which is open to the public for reference purposes. Businessmen, manufacturers, primary producers, government authorities, students and the public generally are invited to make full use of these services. Anyone requiring advice on what statistics are available or which publications may be of most use to them is invited to telephone the Information Officer on Hobart 20 9409.

D. N. ALLEN
*Deputy Commonwealth Statistician
and Government Statistician of Tasmania*

CHAPTER 1

HISTORY AND CHRONOLOGY

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Chapter 1

HISTORY AND CHRONOLOGY

DISCOVERY

The Period of Dutch Exploration, 1606-1642

In 1606, Captain William Jansz in the *Duyfken* was sent from Java to explore the islands of New Guinea and, crossing Torres Straits unawares, coasted along the west of Cape York Peninsula; this was the first of a series of voyages by Dutch captains who, in the next 30 years, acquired some knowledge of the western shores of the unknown land. Not all voyages were undertaken with the aim of exploration—Dirk Hartog's long journey along the western shore of Australia in 1616 resulted from his sailing too far east on the route from the Cape of Good Hope to Java. Some later captains on the same route even regarded the western Australian coast as a suitable landfall before turning north for Java—a commentary on the difficulty of navigation when longitude had to be established by dead reckoning.

In 1642, the Dutch East India Company despatched from Java an expedition of two vessels, the *Heemskirk* and *Zeehan*, under Captain Abel Tasman, with instructions to investigate the extent of the unknown land thought to exist between New Guinea and the western coast of Australia. One immediate aim of the Governor-General, Anthony Van Diemen, was to find a southern route from Java to Chile so that ships of the Company could either trade or plunder along the Pacific coast of South America; a question to be resolved was whether any land mass extending far south blocked such a route.

The original plan was to sail west to Mauritius, to run down to 52° or 54° south latitude and then to proceed east; assuming no land was discovered, it was then intended to turn north in either the longitude of eastern New Guinea or possibly of the Solomons. If Tasman had followed this plan in every detail he might have discovered the east coast of Australia, anticipating Cook's work by more than a century. As it turned out, the extreme southern latitudes were too hostile and accordingly Tasman was sailing east in latitude 42° south when he sighted the mountainous west coast of Tasmania on 24 November 1642.

The Dutch navigator skirted the south coast and made a landing on the east coast for water in Blackman Bay (from an anchorage south of Marion Bay). He then sailed north to St. Patricks Head, crossed the Tasman Sea and discovered New Zealand, returning to Java by a route to the north of New Guinea. Tasman had thus performed the feat of circumnavigating Australia in a single voyage without once sighting the Australian continent.

In honour of the Governor-General of the Indies, he named the first discovery Van Diemen's Land, imagining it to be the most southern extension of the Australian continent, an illusion that was only completely dispelled by Bass and Flinders when they circumnavigated the island in 1798. The Dutch did not follow up the discoveries of Tasman or their other explorers because they were interested in establishing trading posts only among peoples with a higher degree of civilisation than the natives of Tasmania or mainland Australia appeared to possess. (Tasman's crew saw no natives in Tasmania but inferred their existence from sounds, cuts in trees and the smoke of fires.)

The Period of British and French Exploration, 1772-1798

One hundred and thirty years passed before Tasmania was visited again, this time by the French navigator Marion du Fresne in 1772; he virtually repeated Tasman's original landfall, skirted the south coast and came to anchor in the bay that bears his name (Marion). His visit is memorable for the first contact between Europeans and Tasmanians and for the slaying of the first native by gunfire. Du Fresne himself was killed by Maoris in New Zealand on the same voyage.

A year later, Captain Tobias Furneaux in the *Adventure* became separated from Captain Cook in the *Resolution* on the route to New Zealand and made for Tasmania to obtain water. He eventually anchored off Bruny Island in Adventure Bay but mistakenly believed himself to be in the area of Tasman's original landing which was at least 70 kilometres to the north-east. From this original error sprang a confusion in nomenclature which persists to this day (e.g. Frederick Henry Bay, first named in Tasman's record, appears on maps in an area that Tasman did not even see). Furneaux then sought to investigate the possibility of a strait separating Tasmania from the continent recently explored by Cook, but shoals in the islands bearing his name (Furneaux Group) caused him to abandon the project and make for New Zealand.

In 1777, Cook, on his third voyage, used the Adventure Bay anchorage without detecting Furneaux's navigational errors.

The settlement at Port Jackson in N.S.W. in 1788 put Tasmania on a major sailing route, the First Fleet passing south of the island on its way there. To have sailed north of the island would have invited shipwreck on the Australian 'mainland' of which Tasmania was then believed to be part. In the same year, Captain William Bligh put into Adventure Bay with the *Bounty* on his way to Tahiti and to the famous mutiny; he had been on Bruny Island before, as Cook's sailing master.

Captain Cox of the *Mercury* anchored in the Bay known as Cox Bight in 1789, charted some of the south coast and explored the strait between Maria Island and the east coast.

The next visitor (1792) was Admiral Bruny D'Entrecasteaux commanding *Recherche* and *Esperance* and searching for La Perouse who had not been heard of since 1788 when he sailed from Botany Bay. The Admiral sailed north hoping to anchor in Adventure Bay, but a navigational error put his ships too far west with the happy result that he discovered the magnificent channel separating Bruny Island from the Tasmanian mainland and was the first to sail up the River Derwent. Leaving Tasmania, the expedition sailed as far west as Cape Leeuwin in Western Australia when it became imperative to take on water. It is an indication of the lack of knowledge then available that D'Entrecasteaux had to return to Adventure Bay to fill his casks. In the same year, Bligh put into Adventure Bay on his way to obtain breadfruit trees in the Pacific for transplanting in the West Indies.

The year 1794 was notable for the visit of Commodore John Hayes who had sailed from India with the *Duke of Clarence* and the *Duchess*; he explored the Derwent as far as Mt Direction and named Risdon Cove, later to be the site of the first settlement.

Tasmania an Island

Two voyages followed which established that Tasmania was an island. Surgeon George Bass in a whaleboat left Port Jackson in 1797, rounded Wilsons Promontory and discovered Western Port. The nature of tides and swells encountered told Bass that there was no bay but rather a strait of considerable magnitude. In 1798, Bass and Matthew Flinders were given the sloop *Norfolk* to decide the question for all time and they circumnavigated the island, commencing on a westerly course along the north coast where they discovered the Tamar Estuary.

Fear of the French

In the original annexation of Australian territory by Cook in 1770, Tasmania was excluded since the southern limit was proclaimed as 38° south latitude. Formal possession of Tasmania was taken by Governor Phillip on 26 January 1788, when he read his

commission to the people of the First Fleet at Sydney Cove. Now that it was established that Tasmania was an island, the authorities both in London and Sydney felt that some steps should be taken to block the French from making any claims to possession. The urgency of doing this was underlined by the arrival in the D'Entrecasteaux Channel of Admiral Baudin with the *Geographe* and *Naturaliste* in 1802. The expedition's navigator, Freycinet, charted Tasman and Forestier Peninsulas and correctly identified the Frederick Henry Bay of the Dutch era. The expedition then called at Port Jackson before sailing south into Bass Strait where it was intercepted at King Island by Lieutenant Robbins in the *Cumberland*. Announcing his intention boldly to the French Admiral, the Lieutenant disembarked his small company and formally annexed the island in the name of King George III. Governor King at Port Jackson who gave Robbins his instructions was not satisfied that merely formal acts of annexation would block the French indefinitely and decided that permanent settlements were required if British sovereignty was to be retained. To this decision can be attributed the settlement at Risdon (1803) and the Hobart and Port Dalrymple settlements of 1804.

Geography of the Original Landing

Tasman's anchorage was near Visscher Island and the first landing was made by longboats which passed through the narrows into Blackman Bay. The second landing occurred in the south-east of North Bay where a lagoon proved too brackish for filling water casks.

The last landing was made near Tasman Bay where the navigator had hoped to take formal possession of the new land. The surf being too rough to get the longboat ashore, the carpenter swam through the waves, planted the Dutch flag and then fought his way back to the longboat.

SETTLEMENT

The First Settlement at Risdon (1803)

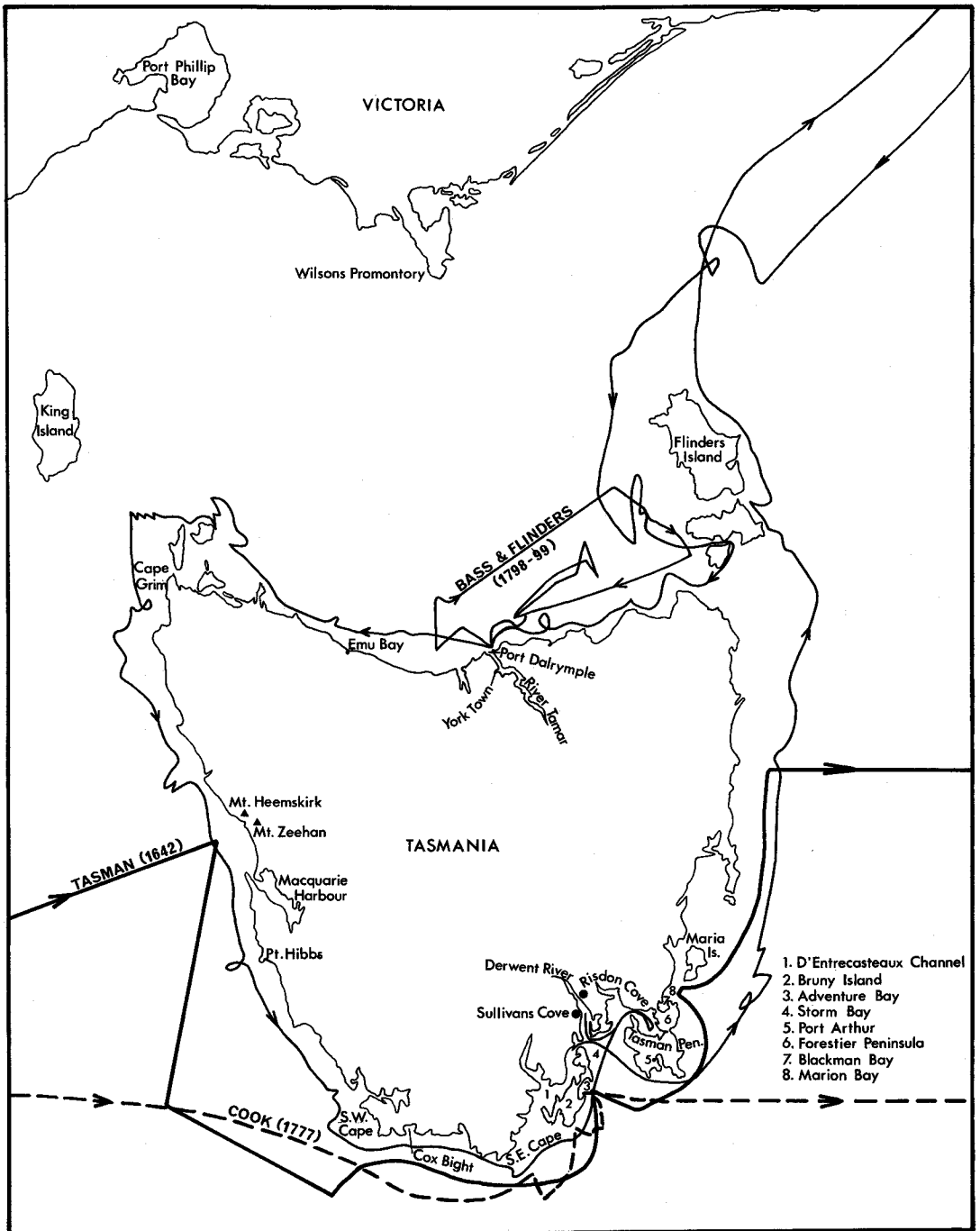
The original explorers of the Island (including the French) had very largely concentrated their attention on the south-east and, in particular, on the sea approaches to the Derwent. Faced with the necessity for establishing a settlement to assert British sovereignty, Governor King had a number of possible sites to consider, including King Island, Port Phillip and Port Dalrymple (the Tamar Estuary). His eventual choice was the area of the Derwent Estuary and he reported his intention to the Admiralty as follows:

'My reasons for making this settlement are the necessity there appears of preventing the French gaining a footing on the east side of these islands; to divide the convicts; to secure another place for obtaining timber with any other natural productions that may be discovered and found useful; the advantages that may be expected by raising grain; and to promote the seal fishery.'

Commissioned to make the Derwent settlement, Lieutenant John Bowen sailed from Sydney with the *Albion* and *Lady Nelson*; the two vessels separated in a gale but were anchored at Risdon by 11 September 1803, when Bowen went ashore. The slenderness of Governor King's resources is apparent from the fact that the settlers—free, convict and military—numbered only 49 and that the *Albion* was a British whaler under temporary charter (she caught three sperm whales on the voyage while becalmed).

The responsibility for the choice of the Risdon site attaches ultimately to Bass who had made detailed investigations of the Derwent in 1798 from the *Norfolk*. He had reported as follows: 'The land at the head of Risdon Creek, on the east side, seems preferable to any other on the banks of the Derwent.' It was not surprising, therefore, that Bowen's commission from Governor King directed him to locate the new settlement in the Risdon area. In fact, the site ultimately proved unsuitable due to the inadequate

TASMANIA: DISCOVERY AND EXPLORATION



stream and the poor landing place; these handicaps were aggravated by the wretchedness of the human material at Bowen's disposal, a characteristic not altered when the camp was increased to nearly 100 persons.

If the settlement has any claim to fame, it derives from an encounter with natives who descended on the camp on a hunting expedition and who were fired on by the soldiers in a state of panic. Whether the future barbarities of inter-racial war could have been avoided is an open question but this encounter was the first phase of a struggle that ended in the extinction of a race.

The final act of the Risdon settlement was played on 9 August 1804, when the *Ocean* sailed for Port Jackson with Lieutenant Bowen and most of his people; Lieutenant-Governor Collins at the new settlement at Hobart had decided to close down the Risdon camp and held such a low opinion of these early colonists that he retained only 13 convicts and one free settler.

The Settlement at Hobart (1804)

If Lieutenant-Governor Collins had carried out his original instructions, then Hobart today might have been the name of the capital of Victoria situated on Port Phillip Bay. The British Cabinet, impressed by Governor King's warnings on possible French penetration, decided to carry out the occupation of Port Phillip direct from Britain and, to this end, commissioned Lieutenant-Colonel Collins (Royal Marines) to command an expedition in the *Calcutta* with the *Ocean* as tender to secure the strategic Bass Strait. Control of the Strait meant that the dangerous 1 100 kilometre journey around Van Diemen's Land was avoided and also prevented a hostile foreign power from threatening British sea lanes in the South Pacific.

The settlers eventually arrived, via Rio De Janeiro and the Cape of Good Hope, and formed a temporary camp near the site of the modern Sorrento township. For a variety of reasons, Collins was unhappy about the locality; he considered navigation hazardous, the soil poor and water inadequate. He was unwilling to develop promising land at the head of the bay due to the show of strength by large bands of natives and because of its distance from the open sea. Collins had seen the problems of isolation at Sydney and considered a settlement at the head of Port Phillip Bay unduly hazardous. With the wind in the wrong quarter a ship could be locked in the bay for several days thereby defeating the purpose of the settlement—a port to protect and control Bass Strait. Accordingly he wrote for advice to Governor King in Sydney and was left free to decide between the River Derwent and Port Dalrymple as possible sites for transfer of his command. He was probably swayed in his eventual choice of the River Derwent by its reputation as a safe harbour and the fact that Risdon had already been settled.

On 15 February 1804, Collins, with the first detachment from Port Phillip in the *Lady Nelson* and *Ocean*, anchored off the new settlement at Risdon. A quick inspection satisfied Collins that the site was quite unsuitable and he made his own reconnaissance, eventually selecting the area on the western bank known as Sullivans Cove and ordering that the expedition should be disembarked with all its stores in the vicinity of Hunters Island. In the same month, Collins reported to King that his two ships were 'lying within half a cable-length of the shore in nine fathoms of water'; the Lieutenant-Governor had selected gentle slopes for his settlement, located a fine stream running from Mt Wellington and found near the mouth of the stream depths of water which would accept the draught of any vessel of his day (or of the modern era).

The following table shows the early composition of the settlement at Sullivans Cove (but excludes details of the Risdon Camp):

Number Victualled at Sullivans Cove, 26 February 1804

Quality	Men	Women	Children
Military establishment	26	1	—
Civil establishment	6	—	—
Settlers	13	5	13
Convicts	178	9	8
Supernumeraries	(a) 3	—	—
Total	226	15	21

(a) Includes one Aboriginal from Port Jackson.

The strength of the Colony was increased to 433 persons in June 1804 when the *Ocean* returned from Port Phillip, where it had taken aboard the balance of the original expedition. From the camp on Sullivans Cove has sprung the present city and port of Hobart.

David Collins was no amateur in the field of colonisation—he had sailed with Governor Phillip as Judge Advocate in the First Fleet in 1788 and had acted as Secretary to the Governor till 1796 when he returned to Britain with excellent recommendations.

The Settlement on the Tamar (1804)

While the Lieutenant-Governor was still in Port Phillip Bay, wondering where best to settle, he sent his namesake, William Collins, on a voyage of exploration to the Tamar Estuary. William Collins followed the river up as far as the Cataract Gorge and returned to Port Phillip with a good account of the possibilities of the Tamar for settlement; in his absence, however, the Lieutenant-Governor had made up his mind and was already preparing for the expedition to the Derwent.

Later Governor King received a despatch from Lord Hobart (Secretary of State for the Colonies) who, by a grotesque error, recommended the establishment of a settlement at Port Dalrymple 'upon the southern coast of Van Diemen's Land and near the eastern entrance of Bass' Straits'. If Lord Hobart really meant 'south' then Collins' move to the Derwent had anticipated his wishes. However, since Collins had in fact left Port Phillip, was it not necessary to re-occupy Port Phillip or possibly to watch the Strait from Port Dalrymple? King knew that Hobart's despatch was written in ignorance of Collins' move and accordingly decided to use his own initiative without raising questions of geography with the Secretary for Colonies.

In Hobart's despatch, Lieutenant-Colonel William Paterson (New South Wales Corps) was nominated as Lieutenant-Governor of the new colony. Paterson set sail with 57 soldiers and convicts in the *Integrity* and the *Contest* but after a month of adverse winds both ships were forced back to Port Jackson. A second attempt was made using *Buffalo*, *Lady Nelson*, *Francis* and *Integrity* and increasing the party to 181. This time the Tamar was successfully entered but H.M.S. *Buffalo* went aground and was, with some difficulty, brought to anchor in Outer Cove (George Town) on 4 November 1804. Lieutenant-Colonel Paterson decided that *Buffalo* must be immediately unloaded and accepted the Outer Cove site as a suitable camp while he undertook a more detailed reconnaissance of the Tamar.

Although he penetrated as far as the fertile site of Launceston, Paterson made the extraordinary decision to set up his headquarters at the head of West Arm and founded York Town, while still maintaining small establishments at Outer Cove, Low Head and Green Island. In deciding on York Town, one can only imagine that Paterson was guided purely by the strategic necessity, as was Collins at Sorrento, of being near to Bass Strait and that he gave little thought to the problem of soil fertility and cultivation.

In March 1806, Paterson was willing to admit that York Town was a most unsuitable site and he accordingly moved his headquarters to the present site of Launceston. Today,

York Town and Risdon have one thing in common—the almost complete absence of any indication that settlements ever existed.

Paterson, before setting out on his expedition, had been involved in an argument as to his status, but Governor King had resolved the matter by dividing Tasmania at the 42° parallel and making Collins and Paterson sovereign in their respective halves, but subordinate to him as Governor.

CHRONOLOGY

Preface

The following chronology was originally compiled in two sections, the period 1642 to 1929 from a document specially prepared by officers of the State Archives, and the period beginning 1930 from a search of contemporary newspapers by Bureau officers. Greater detail is included in earlier editions of the *Year Book*.

In the record of more recent years, it was found impossible to describe purely Tasmanian events in isolation since certain national events necessarily form part of the history of a state within a federal system; particularly is this true with regard to some Federal Government decisions, the state of the economy and industrial arbitration. On the other hand, there is the difficulty of deciding which events of a purely local character are sufficiently important to warrant inclusion. Some items have been introduced not because they are important but because they have a strong local flavour. This difficulty of selection is partly avoided by giving the record of the most recent years in more detail but inevitably such a policy results in matters of major and minor importance being mingled without distinction. It follows also that the second part of the chronology is limited largely to what the newspapers of the day considered important and that some events of greater significance may have escaped notice.

To round off the picture of any given year, there is a constant temptation to introduce events of world importance; as far as possible, this has been avoided except where such events had considerable local impact. In no way should the record which follows be interpreted as an 'official' chronology of the State; in actual fact, the record derives from two levels of subjective evaluation, firstly, the selection of items of importance by contemporary journalists and, secondly, the further selection of items from this narrowed field by the compilers of the chronology.

Chronology of Events from First Discovery of Tasmania

- 1642 Abel Janszoon Tasman, commanding *Heemskirk* and *Zeehan*, sighted west coast and named his discovery 'Anthony Van Diemenslandt'. Landings on Forestier Peninsula and near Blackman Bay on east coast.
- 1772 Landing of a party from Du Fresne's expedition at Marion Bay and affray with the Aborigines.
- 1773 Tobias Furneaux in the *Adventure*, became separated from James Cook in *Resolution* and landed a party at Adventure Bay.
- 1777 James Cook anchored *Resolution* in Adventure Bay on third expedition.
- 1788 William Bligh anchored *Bounty* in Adventure Bay on first breadfruit expedition.
- 1789 John Henry Cox sailed *Mercury* from Cox Bight to Maria Island.
- 1792 William Bligh, on second breadfruit voyage, anchored *Providence* in Adventure bay. Bruny D'Entrecasteaux, commanding *La Recherche* and *L'Esperance*, discovered D'Entrecasteaux Channel and charted south-east coast.
- 1793 D'Entrecasteaux returned for further exploration of south-east coast. John Hayes, commanding *Duke of Clarence* expedition, explored Derwent River.
- 1798 Matthew Flinders and George Bass circumnavigated Tasmania.
- 1802 Nicholas Baudin, commanding *Geographe* and *Naturaliste*, explored south-east coast.
- 1803 John Bowen's party of 49 made first settlement at Risdon Cove.
- 1804 David Collins' settlement party landed at Sullivans Cove (Hobart). Aborigines killed in an affray at Risdon. Risdon settlement closed down. William Paterson's settlement party landed at Port Dalrymple (Tamar Estuary).
- 1805 Collins forced by famine to cut rations by one-third.

- 1806 Settlers moved from York Town to Launceston area.
- 1807 Thomas Laycock's party crossed island overland from Port Dalrymple to Hobart. First Norfolk Island settlers shipped to Hobart in *Lady Nelson*.
- 1809 Governor William Bligh aboard *Porpoise* anchored in Derwent after NSW mutiny and embarrassed Collins with problem of jurisdiction.
- 1810 Lieutenant-Governor Collins' death. Issue of newspaper *Derwent Star*.
- 1811 Governor Lachlan Macquarie's first visit to Tasmania.
- 1812 Lieutenant-Governor Thomas Davey arrived. Northern settlement at Port Dalrymple made subordinate to Hobart. *Indefatigable* brought first shipload of convicts direct from England.
- 1815 Hobart and Port Dalrymple declared free ports for import of goods. Davey proclaimed martial law against bushrangers. James Kelly circumnavigated island in a whaleboat.
- 1816 First issue of *Hobart Town Gazette*.
- 1817 Succession of William Sorell as Lieutenant-Governor.
- 1818 Death of Michael Howe, notorious bushranger.
- 1820 Visit by John Thomas Bigge to conduct inquiry into colonial administration.
- 1821 Second tour by Governor Macquarie.
- 1822 Penal settlement established at Macquarie Harbour.
- 1823 Passage of British Act 'for the better administration of justice in NSW and Van Diemen's Land'.
- 1824 Inauguration of Supreme Court, Arrival of Lieutenant-Governor George Arthur.
- 1825 First Launceston newspaper, the *Tasmanian and Port Dalrymple Advertiser*, established. Tasmania constituted a colony independent of NSW Establishment of appointed Executive and Legislative Councils. Departure of Governor Darling from Tasmania left Arthur with the authority of Governor (but not the title).
- 1826 Van Diemen's Land Co. sent first party to select land and establish farming operations. Appointment of Commissioners of Survey and Valuation.
- 1827 Lieutenant-Governor received a petition for trial by jury and some representation in Legislative Council.
- 1828 Passage of British Act 9 Geo. IV, cap. 83 which increased membership of Legislative Council. Martial law proclaimed against Aborigines.
- 1829 First settlement at Emu Bay (Burnie).
- 1830 George Augustus Robinson began his mission to conciliate the Aborigines. First use of juries in civil cases. Beginning of the 'Black Line', the military campaign to round up the Aborigines. Publication of *Quintus Servinton*, first novel to be published in Australia. Port Arthur established as a penal settlement.
- 1831 Approval of British Government's new land regulations discontinuing free grants of land, and replacing them with land sales.
- 1832 First shipment of Aborigines to Straits Islands. Establishment of the Caveat Board to settle land disputes and to confirm titles. Maria Island closed down as a penal settlement.
- 1833 Macquarie Harbour penal settlement closed down.
- 1834 Henty brothers from Launceston became first settlers in Victoria occupying land in Portland Bay area.
- 1835 John Batman sailed from Launceston to Port Phillip as agent for the Port Phillip Association. Tasmania divided into counties and parishes. Opening of Ross Bridge. Population estimated as 40 172 persons.
- 1837 Arrival of Sir John Franklin and assumption of office as Lieutenant-Governor.
- 1838 Sessions of Legislative Council opened to the public.
- 1840 Cessation of transportation to NSW and consequent increase in numbers transported to Tasmania. Population estimated as 45 999 persons.
- 1841 Assignment System of convict discipline replaced by the Probation System. Rossbank Observatory for magnetic and meteorological observations established in Hobart.
- 1842 Tasmania created a separate Anglican diocese. Hobart made a city. Peak year for convict arrivals (5 329).
- 1843 Recall of Sir John Franklin and succession of Sir John Eardley-Wilmot.
- 1844 Transfer of Norfolk Island penal settlement from N.S.W. to Tasmanian control.
- 1845 Resignation of the 'Patriotic Six' members of the Legislative Council, over the drain on colonial revenue for support of Imperial police.
- 1846 Recall of Eardley-Wilmot. Foundation of the Launceston Church Grammar and The Hutchins Schools.
- 1847 Succession of Sir William Denison. The Lieutenant-Governor re-appointed the 'Patriotic Six'.

- 1848 Tasmania now the only place of transportation in the British Empire.
- 1850 Foundation of the Anti-Transportation League. Population estimated as 68 870 persons.
- 1851 British Act provided for limited representative government. First elections for 16 non-appointed members of the Legislative Council.
- 1852 First payable gold found near Fingal. Elections held for first municipal councils in Hobart and Launceston.
- 1853 Arrival of last convicts to be transported.
- 1854 Bad floods throughout Colony. Passage of bill establishing responsible government.
- 1855 Succession of Sir Henry Fox Young; title now Governor. British Government approved Constitution Bill.
- 1856 Name of Van Diemen's Land changed to Tasmania. Advent of responsible self-government. Opening of new bi-cameral Parliament with W.T.N. Champ leading first government in the House of Assembly. Re-organisation of Police Department.
- 1858 Council of Education set up. *Rural Municipalities Act* passed.
- 1859 Charles Gould appointed to make geological survey of western Tasmania. Telegraph link established with Victoria.
- 1860 Population estimated as 89 821 persons.
- 1861 Succession of Colonel Thomas Gore Browne. Telegraph cable to Victoria failed.
- 1862 Promotion of scheme for a railway between Launceston and Deloraine.
- 1864 Arrival of first successfully transported salmon and trout ova.
- 1868 Visit by Alfred, Duke of Edinburgh. Primary education made compulsory.
- 1869 Succession of Charles Du Cane. Death of William Lanny, thought to be the last male full-blood Aboriginal. Death of Sir Richard Dry. New telegraph cable laid to Victoria.
- 1870 Withdrawal of remaining Imperial troops. Population 99 328 (Census).
- 1871 Opening of Launceston-Deloraine railway. Tin discovered at Mt Bischoff.
- 1872 Contract concluded for building Main Line Railway.
- 1873 Main Line Railway construction began. Start of economic recovery.
- 1874 Riots in Launceston in protest at rates levied for Launceston-Deloraine railway.
- 1875 Succession of Sir Frederick Weld.
- 1876 Race meetings established at Elwick. Gold nugget worth \$12 200 found at Nine Mile Spring. Death of Trugannini, thought to be last female full-blood Aboriginal. Main Line Railway opened for traffic.
- 1877 Port Arthur closed down as a penal settlement.
- 1878 Increased activity in exploration of West Coast.
- 1879 Settlement of constitutional issue known as the 'Hunt Case'. Rich lode of tin discovered at Mt. Heemskirk.
- 1880 First telephone in Tasmania with line from Hobart to Mount Nelson Signal Station.
- 1881 Succession of Sir George Strahan. Population 115 705 (Census).
- 1882 Increased prospecting on the West Coast.
- 1883 Discovery of the 'Iron Blow' at Mt Lyell.
- 1885 Russian war scare followed by activity in improvement of defences. Formation of Mt Lyell Prospecting Association.
- 1887 Succession of Sir Robert Hamilton.
- 1890 Establishment of University of Tasmania.
- 1891 Collapse of Van Diemen's Land Bank; deep economic depression.
- 1892 Mt. Lyell Mining Co. established.
- 1893 Succession of Viscount Gormanston.
- 1896 Establishment of Tattersalls Lottery by George Adams.
- 1898 Serious bush fires. Tasmanians four to one in favour of Federation at poll.
- 1899 Departure from Hobart of *Southern Cross* (Borchgrevinck) expedition to Antarctic.
- 1900 Departure of Tasmanian contingent to fight in the Boer War.
- 1901 Proclamation of the Commonwealth read. Polling for first elections to Federal Senate and House of Representatives. Succession of Sir Arthur Havelock. Population 172 475 (Census).
- 1903 Celebration of 100 years' settlement cancelled because of smallpox epidemic in Launceston. Suffrage extended to women.
- 1904 Succession of Sir Gerald Strickland at reduced salary.
- 1905 Experiments in wireless telegraphy between Tasmania and the mainland.

- 1907 New Public Library opened; built with gift from Andrew Carnegie.
- 1909 Succession of Sir Harry Barron. Potato crop wiped out by Irish blight. State's first Labor Government under John Earle.
- 1912 Disastrous fire at North Lyell Mine, Queenstown.
- 1913 Succession of Sir William Ellison Macartney.
- 1914 First aeroplane flight in Tasmania. Departure of first Tasmanian contingent to fight in Great War. Formation of Hydro-Electric Department.
- 1915 Serious bushfires.
- 1917 Establishment of electrolytic zinc works at Risdon and of Snug carbide works.
- 1918 End of Great War.
- 1919 First export of frozen meat.
- 1920 Visit by Edward, Prince of Wales. Purchase of site for Cadbury's chocolate factory at Claremont.
- 1921 Population 213 780 persons (Census).
- 1922 Completion of Waddamana power station.
- 1924 First superphosphate manufactured by Electrolytic Zinc Co. at Risdon.
- 1925 Discovery of osmiridium fields at Adamsfield.
- 1927 Inquiry into proposed bridge over Derwent. Visit by Duke and Duchess of York.
- 1929 Serious floods throughout Island. Establishment of automatic telephone system in Hobart. Beginning of economic depression.
- 1930 Export prices fell to half 1928 level. Australian pound devalued so that £1 sterling equalled \$A2.50 (£1/5s).
- 1931 Depression continued—10 per cent cut in federal basic wage. Initiation of austere Premier's Plan. Conversion loan to reduce rate of interest on internal federal debt by 22½ per cent. Census of population deferred.
- 1933 Commonwealth Grants Commission appointed to inquire into affairs of claimant states.
- 1934 Beginning of 35 years of continuous Labour Government with the election of the A.G. Ogilvie Ministry. Second phase of hydro-electric development commenced at Tarraleah and Butlers Gorge.
- 1936 Tasmania linked with Victoria by submarine telephone cable.
- 1937 Epidemic of poliomyelitis. Economic recovery evidenced by \$0.50 'prosperity' loading added to federal basic wage.
- 1938 Paper mill using native hardwoods established at Burnie. First turbines began operating at Tarraleah power station.
- 1939 Outbreak of World War II.
- 1940 Tasmanians sailed for Middle East with Australian 6th, 7th and 9th Divisions.
- 1941 Newsprint production began at Boyer on the Derwent. Tasmanians sailed for Malaya with Australian 8th Division.
- 1942 Uniform federal income tax commenced.
- 1943 The floating-arch Hobart Bridge opened for traffic.
- 1944 Pay-as-you-earn (PAYE) income taxation introduced from 1 July.
- 1945 End of World War II.
- 1946 Cessation of man-power controls. Rejection by Legislative Council of bill to grant Federal Government price control powers for three years.
- 1947 Court action to stop bank nationalisation by Federal Government. Demobilisation of forces completed. 'Displaced persons' commenced arriving from Europe. Population 257 078 (Census).
- 1948 Forty-hour week awarded to most workers from 1 January. Tasmanians voted 'No' almost two to one in referendum denying Federal Government power over prices and rents. Legislative Council's denial of Supply forced dissolution of House of Assembly—Cosgrove Ministry returned to power.
- 1949 Compulsory X-rays introduced in fight against tuberculosis. Clark Dam at Butlers Gorge completed. Theatre Royal purchased by the Government. Sterling devalued by 30.5 per cent and Australian pound similarly devalued.
- 1950 End of federal petrol rationing. Dissolution of House of Assembly granted by Governor and Cosgrove Ministry returned to power. Communist Party Dissolution Bill passed by Federal Parliament.
- 1951 *Communist Party Dissolution Act* declared invalid by High Court. Double Dissolution of Federal Parliament. Referendum to give Federal Government powers in regard to communism—'No' vote prevailed although Tasmanians expressed slight preference for 'Yes'.
- 1952 Single licensing authority established for hotels, clubs, etc. State's free hospital scheme ceased.
- 1953 In September, Arbitration Court abandoned system of quarterly adjustment of federal basic wage. State wages boards suspended quarterly basic wage adjustments.

- 1954 Royal visit by Queen. Bill passed to resolve deadlocks in House of Assembly. Foundation of the Metropolitan Transport Trust.
- 1955 Uranium ore discovered at Mt Balfour and Royal George. Bell Bay aluminium plant officially opened. Trevallyn and Tungatinah power schemes officially opened. Anti-Communist Labor Party (later D.L.P.) formed.
- 1956 State wages boards' restoration of 'cost-of-living' adjustments effective from 1 February but these later again suspended. Sir Ronald Cross granted dissolution of House of Assembly. Labor Party returned to power in State. Official opening of EZ Co.'s sulphate of ammonia plant. Centenary of self-government celebrated.
- 1957 Legislative Council rejected bill giving aid to private schools. First satellites—Sputniks I and II—seen over State. Centenary of Hobart's incorporation celebrated.
- 1958 Establishment of Rivers and Waters Supply Commission. Public Service Tribunal established as an industrial authority.
- 1959 First election to fill 35 seats in House of Assembly; Labor re-elected. New Federal Government system of grants reduced claimant states to two—Tasmania and Western Australia. *Princess of Tasmania* commenced roll-on roll-off ferry service Melbourne to Devonport.
- 1960 Liapootah power station commissioned. Zeehan-Strahan railway closed. Inland Fisheries Commission created. First Tasmanian telecast. Australian 'give way to the right' rule introduced on roads.
- 1961 *William Holyman*, cargo container vessel, entered Bass Strait trade. Legislative Council rejected equal pay legislation.
- 1962 Catagunya turbines began producing electricity. State Wages Boards granted three weeks annual leave. State subsidies announced for municipal fluoridation schemes. Closure of Mt Lyell railway, Queenstown to Strahan.
- 1963 Abolition of State entertainments tax. Federal Court increased margins 10 per cent and granted three weeks annual leave. Universities Commission recommended medical school for Tasmanian University.
- 1964 TAA commenced intrastate air services. Tasman Bridge opened for traffic. Hobart's water supply fluoridated. Glenorchy raised to city status.
- 1965 *Empress of Australia* sailed from Sydney on first voyage to Hobart. Provisional driving licences introduced. Dental Nurse scheme for schools announced. D'Entrecasteaux scallop beds closed for 1965 season.
- 1966 Decimal currency introduced 14 February. Burnie-Launceston co-axial cable completed. Equal pay for certain State Public Service females. Breathalyser tests approved for use by police. STD extended to Tasmania.
- 1967 Bush fire disaster of 7 February resulted in 62 deaths and over 1 000 houses destroyed. Federal Arbitration Commission abolished basic wage and substituted total wage concept but basic wage retained in State awards. Mt Cleveland tin mining town of Luina completed. HEC water reserves only 16 per cent of normal; introduction of daylight saving and power rationing.
- 1968 HEC Repulse Dam on lower Derwent completed. Batman Bridge across lower Tamar opened. Federal Government subsidy for apples and pears exported to UK and other countries. Full adult suffrage for Legislative Council elections from 1 July 1969. Capital punishment abolished.
- 1969 Parangana Dam (Mersey-Forth scheme) completed. North-West General Hospital opened at Burnie. State election resulted in 17 ALP, 17 Liberals, one Centre Party (Mr. Lyons). Mr. Lyons combined with Liberals to form coalition government; ended 35-year Labor rule in Tasmania. Full Bench of Federal Arbitration Commission granted equal pay to females performing equal work; female salaries to be raised to male salaries in stages. Copper smelter at Mt Lyell closed; concentrate sent to Japan and Port Pirie (SA) for treatment.
- 1970 First pyrites railed from Rosebery to Burnie sulphuric acid plant. EZ Co. to establish \$6.3m residue treatment plant. Royal visit. Parliament legislated to introduce permanent daylight saving. State premiers accepted Tasmanian formula for reimbursement in lieu of receipts duty.
- 1971 \$25m APPM Ltd. Wesley Vale paper plant opened. \$9m expansion program at Comalco (Bell Bay) completed. Serious shipping strike. Population 390 413 persons (Census).
- 1972 K.O. Lyons resigned cabinet portfolios and ended Liberal-Centre Party Coalition. APPM Long Reach woodchip plant commenced production. ANL vessel *Princess of Tasmania* made her final trip to Tasmania. Mt Lyell Mining and Railway Company Ltd fired last charge at its West Lyell Open-cut Mine. Federal elections—ALP returned to power (after 23 years in Opposition). 300 million years old fossil of dragon fly discovered in Hellyer Gorge (west coast area).
- 1973 First train travelled the Bell Bay rail link. The first legal casino in Australia—Wrest Point—officially opened. Vote extended to 18-year olds. The \$121m Mersey-Forth HEC scheme officially opened. Storeys Creek tin mine closed down. The *Blythe Star* lost at sea while on charter to the Transport Commission. Tasmania voted in line with other Australian states on prices and incomes referenda—'No' to both.

- 1974** BHP announced \$28.5m expansion project for the Temco ferro-alloy plant at Bell Bay. Workers under State Wages Boards' awards granted four weeks annual leave. Anti-pollution regulations under the *Environment Protection Act* gazetted. Royal Commission's report on urban transport advocated cessation of suburban rail services. Transport Commission's ship *Straitsman* sank in Yarra River. High Court ruled Tasmanian tobacco tax valid, but method of collection invalid. Double dissolution of Federal Parliament. Federal Labor Government re-elected. Women under State Wages Boards' determinations awarded equal pay. The 140-metre high Gordon Dam completed. No fault third party insurance scheme implemented.
- 1975** Tasmanian suburban rail services ceased. Bulk ore carrier *Lake Illawarra* rammed the Tasman Bridge, leaving a 128-metre gap and causing 12 deaths. TAB began operating. Transmission of colour television programs commenced in Tasmania. Arbitration Commission adopted wage indexation in principle. Draft Management Plan for the South-West National Park officially released. Plans released for second permanent Derwent crossing. Federal Government takeover of Tasmanian railways. Temporary Bailey bridge across the Derwent opened. Hotels allowed to open for Sunday trading.
- 1976** Hobart recorded its highest ever maximum temperature of 40.8°C. Family Law Courts established in Tasmania. Investigation of a site for a second Derwent crossing began. A government-commissioned inquiry recommended the abolition of the TCAE in Hobart and expansion of the northern campus. An estimated 5 000 sheep shot and buried following low sheep prices. Sea cargo to and from Tasmania to be subject to a freight-equalisation scheme. Cormo sheep, a new breed developed in Tasmania, exported to the USA. South-West National Park doubled in size in line with South-West Management Plan proposals. British importers called for changes in the fruit marketing system following the arrival of poor quality apples from Tasmania. Precipitous Bluff to be included in South-West National Park following an agreement by APM to relinquish timber concessions in the area. Federal Government announced introduction of south-bound freight subsidy scheme which would apply retrospectively to cargo shipped from 1 July 1976. The Neilson Labor Government returned to power with a reduced majority.
- 1977** Federal Government confirmed Kingston as the site for Australia's new Antarctic Base. Radar guns introduced for use by the Police. Military Tattoo cancelled for 1978; State Government announced plans to take over 1979 Tattoo. The Premier, Mr. Nielson, announced his retirement from 1 December to become Tasmania's Agent-General in London. A \$121m expansion, increasing plant capacity by 93 000 tonnes, opened at Comalco Aluminium (Bell Bay) Ltd. Tasman Bridge re-opened 8 October (closed since 5 January 1975). The first 144 000 kW generator commissioned at Gordon River power station. Arbitration Commission granted agricultural workers a 40-hour week plus four weeks annual leave. Estates passing between husband and wife in Tasmania to be exempted from death tax. The Federal Government announced a ten-point plan for the growth and development of Tasmania based on the Callaghan Report. State Fire Authority established. Mr Lowe replaced by Mr Neilson as Premier following the latter's resignation. All five House of Representative seats retained by the Liberals who filled three of the five Senate seats in elections held on 10 December. Drought conditions in many parts of the State the worst for 30 years. Severe frost and hail damage to State's apple crop.
- 1978** Large scale drug operation involving the smuggling of cannabis oil to Tasmania from Thailand uncovered by narcotics agents. Direct flights between Tasmania and Sydney introduced on a trial basis. Detailed plans for a second Hobart bridge made public. State Government refused to allow mining at Precipitous Bluff. Tasman Limited service was reduced from six to three days per week. The Tasmanian Railways came under full control of the Australian National Railways Commission. Hobart's gas mains closed and consumers changed over to low-pressure gas. An earth tremor, centred in Bass Strait, shook coastal centres from Penguin to Boat Harbour. It recorded 4.5 on the open ended Richter Scale. Tasmanian Education Next Decade (TEND) Report released. The Australian National Railways Commission announced that all regular passenger train services in Tasmania would cease from the end of July. Federal Government gave the go-ahead for the new \$8m Antarctic base at Kingston. A major study of the State's coal reserves, by the Mines Department, revealed a potential deposit of 251 million tonnes in the Fingal valley. Mr Neil Batt was elected Federal President of the ALP. Federal Government confirmed its plans to proceed with the Australian Maritime college at Beauty Point. The Cartland Committee of Inquiry into South-West Tasmania proposed that an authority be set up to advise the Government on all future land-use in that part of the State. The State Government approved a scheme to research and plan Tasmania's energy policy. State Cabinet accepted a recommendation that the Federal Hotels consortium be granted the Northern Licence to build the State's second casino. The Federal Government agreed with the Tasmanian Government on the establishment of a trial Tasmania-New Zealand air link. Improved world copper prices helped to put the Mt Lyell Mining Company back on the road to a sound recovery. Savage River Mines announced that it would double the area and the life expectancy of its open cut operations. The mine was expected to be viable for 25 years. The State Government officially handed over 13.3 hectares of land at Newnham to the Commonwealth Government for the Australian Maritime College. The first 'Tasmanian Fiesta' got off to a successful start.
- 1979** A joint Federal-State Government study recommended the go-ahead on a \$28m second Hobart

Bridge. The State Government to expand the South-West Conservation area to more than 20 per cent of the State's total area. Mr. Charles Woodhouse appointed as the state's first Ombudsman. Tasmania's Parliamentary Hansard in operation for the first time. The Chapman Report recommended that the Launceston City Council and seven surrounding councils be replaced by three larger councils. The Premier, Mr Lowe, called a state election for 28 July, 18 months ahead of schedule at which the ALP gained a five seat majority. Southern Tasmania's record winter drought resulted in massive stock clearances and the possibility of disaster for hundreds of farms in the area. The North-West Acid Pty Ltd plant at Burnie closed down. The Bowen Park Visitor Centre at Risdon Cove opened to the public. APPM completed a takeover deal worth \$30.6m for Tasmanian Pulp and Forest Holdings after offering \$6.05 per share. Mr. Bill McKinnon (Labor), who lost his seat in the 28 July election, filed a petition in the Supreme Court claiming new Labor MHA in Franklin, Michael Aird, breached the *Electoral Act* by spending more than the statutory limit of \$1 500 on his election expenses. This began the so-called 'Electoral' or 'Constitutional Crisis'. The *Ombudsman Act* officially came into force. Ships over 25 metres in length were prohibited from sailing under the Tasman Bridge during peak traffic periods; in off-peak periods the passage of ships was to have priority and the bridge was to be closed to traffic. The HEC announced a planned \$15m expansion to the Great Lake power scheme to increase water capacity as a buffer against prolonged dry spells. The State Treasurer announced changes to the land tax system; no land tax would be payable on a person's principal residence regardless of its value. The Devonport Mall was opened. Hobart began increased permanent Saturday morning retail shopping. The HEC released a report which recommended a \$1.36 billion power development scheme involving the Lower Gordon, Franklin and King Rivers to meet the state's electricity needs until the year 2000. The Minister for Education, Mr. Holgate, announced regionally based education priorities; advanced education in the North, community education in the North-West and university education in the South. A new ballot system involving the rotation of names on the ballot papers used for House of Assembly elections became law. The Tertiary Education Commission announced that teacher education courses should be offered by only one education body, either the University of Tasmania or the College of Advanced Education.

- 1980** A seven-year program sponsored by the Federal and State Governments was approved to conserve and develop the historic Port Arthur region. The Federal Government's approval of a joint fishing venture between Tasmania and the Soviet Union was withdrawn as part of the Australian Government's protest against the Soviet invasion of Afghanistan. Work commenced on the first stage of the second Hobart bridge. Federal Government approved proposals for the Hobart-Christchurch air link. Air Tasmania Pty. Ltd merged with a Melbourne aircraft company, Bass Air. The Minister for Education, Mr. Holgate, announced that the University of Tasmania will control teacher education in the South. A survey conducted by the Australian Tourist Commission showed Tasmania as Australia's top tourist destination. A by-election for the Denison electorate was held after the 'electoral crisis' of the 1979 State election (see 1979 *Tasmanian Year Book* pp 594, 595). The seven seats were won by three Labor, three Liberal and one Australian Democrat member, Dr Norman Sanders. The State Government accepted an Opposition proposal that it invite the Federal Government to use the Mt Nelson College of Advanced Education campus as a defence forces academy. The Repco Bearing Company announced a \$5.4m expansion at its Launceston factory. Electrona Carbide borrowed \$4m from a Sydney merchant banking group after another crisis faced the Company. Communist bloc countries had placed a virtual boycott on Australian carbide products. APPM announced that it was considering establishing a \$150m paper machine at Wesley Vale which would create hundreds of jobs and triple present sales. The Hobart City Council approved the establishment of a refugee centre at Mount St Canice to house sixty Vietnamese refugees. Large coal reserves were discovered in a seam in the Fingal Valley. A new West Coast tin mine was forecast following the release of promising drilling results from Mt Bischoff. The Committee on Primary Education (COPE) released its report. The Westbury Council approved building plans worth \$9m for the Tasmanian Country Club Casino to be built outside Launceston. Gale force winds in Southern Tasmania ruined at least 50 per cent of the apple export crop. The State Government announced that it would inject another one million dollars into Electrona Carbide Industries in a last-ditch attempt to keep the company solvent. In addition, the Government guaranteed a further \$10m in loans to the Company. Electrona Carbide Industries announced plans to borrow another \$5m to help it through its liquidity problems. The Treasurer introduced legislation into the House of Assembly to allow \$530m to be spent on the HEC's Pieman River development. OBM Pty Ltd, one of Tasmania's oldest bookstores was sold to Sydney based publisher and bookstore chain Angus and Robertson. In a submission to the Government, the National Parks and Wildlife Service questioned the political motives and professional competence of the Hydro-Electric Commission. The Hydro-Electric Commissioner, Mr Ashton, said that Tasmania had no power to spare for an electricity grid to South-East Australia. The Federal Government announced that the new \$25m marine science centre run by the CSIRO's division of Fisheries and Oceanography will be transferred from Cronulla, NSW to a site near Hobart. The \$6.2m Curries River Dam near George Town was opened. The Prime Minister pledged support for establishing the international headquarters of the Antarctic treaty nations in Hobart. The controversial Electrona Carbide plant bill was passed by the Legislative Council which permitted the Government to sell the carbide plant to White Industries for one dollar. Petro Quest Pty Ltd said

that tests for oil shale showed promise in the Wynyard area. The Prime Minister, Mr Fraser, officially opened the Australian Maritime College at Beauty Point. A Commonwealth-State working party was formed to investigate the possibility of a floating dock for Hobart. An American company, Weaver Oil, was granted permission to begin a \$7m oil exploration program in the Tasmanian sector of Bass Strait. Hobart was selected as the site for the permanent headquarters of the International Division for the Conservation of Antarctic Marine Living Resources. A State Government report suggested that an immediate start on a thermal power plant be made as well as a small hydro-electric power scheme. East-West Airlines were given approval for the only direct Hobart-Sydney air service. The Australian Heritage Commission included Tasmania on the register of the National Estate, setting strict guidelines for future development including the highly controversial Franklin and Lower Gordon rivers. The National Parks and Wildlife Service started a major advertising and promotion campaign aimed at short-circuiting the HEC's proposed Franklin-Lower Gordon power scheme. General Jones announced a \$1m expansion program at Smithton. State Cabinet decided in favour of hydro rather than thermal generation for Tasmania's next power development. The HEC recommended the conversion of the Bell Bay power station from oil to coal fired. The Federal Government gave the 'go-ahead' for the Hobart-Christchurch air link to operate from November 1980. The run would be serviced by TAA and Ansett but would operate under Qantas flight numbers. The State Government decided to save the Franklin River by opting for a more expensive set of hydro-power schemes in the South-West. The Franklin River would be included in a Wild Rivers National Park which will be extended to include the Davey River. The decision was to flood the Gordon at the junction of the Olga and to construct four single stage schemes on the King River. The government also told the HEC to investigate several small power schemes outside the South-West. Bass Strait Oil and Gas Company announced a \$11.5m exploration program in the Tasmanian sector of Bass Strait. The Mt Lyell mine at Queenstown, in danger of closing two years previously, announced a multi-million dollar expansion following a record \$5m profit. Federal Hotels announced a new convention centre-casino complex able to cater for 2 000 delegates. State Government Caucus elected Michael Barnard as Deputy Premier after the resignation of Mr. Batt. Mrs Gill James filled the Cabinet vacancy. The state Government gave the official go-ahead for construction to start on the \$18.5m Country Club Casino complex. The Federal Government announced that Tasmania's textile industry will get increased protection from overseas competition for another seven years. A report tabled in the Legislative Council recommended boundary changes for Legislative Council divisions—Tamar, Meander, Mersey, Cornwall, Westmorland and South Esk. Fierce competition between supermarkets resulted in all day Saturday trading by several supermarkets but the Government said it would legislate to stop Saturday afternoon trading. Mr. Bob Graham replaced Mr. Neil Batt in State Parliament after a five-way count back of Mr Batt's primary votes. Parts of Southern Tasmania were facing the worst drought since white settlement. The State Government gave the go-ahead for Ansett and TAA to fly from Hobart to Christchurch. The Chairman of Mt Lyell Mining and Railway Co. Ltd announced plans to spend more than \$14m over the next three years in upgrading its copper operations at Queenstown. Renison Ltd found a further 700 000 tonnes of tin ore on its West Coast lease. The education department was looking for ways to cut its administrative and research sections in a bid to provide jobs for the 200 bonded students who faced unemployment in 1981. The Auditor-General revealed a multi-million dollar list of State Government mistakes and failures in control of construction projects. APPM announced that it will spend \$35m over the next two years in converting its energy source from oil to a combination of coal, wood waste and bark. The HEC announced that charges will be increased by 11 per cent from 1 January 1981 to provide capital funds for the Commission's essential works program. The Tasmanian Potato Industry Authority became inoperative as there were only three members—not enough for a quorum. In the Federal election all five sitting Liberal MHR's were returned. Rae, Townley (Lib), Coates, Hearn (ALP) and Harradine were elected to the Senate. The Mt Nelson campus of the TCAE will be converted to a community college. The Federal Minister for National Development and Energy, Senator Carrick, released a report which showed that a sugar beet ethanol industry in Tasmania would be able to compete with other forms of energy at current prices. Cadbury-Schweppes announced a \$2m investment plan for its Claremont factory. Dismissal notices were handed to thirty employees at Electrona Carbide Works who were on short term jobs. The HEC claimed that power bills would increase, electricity would be rationed and a new thermal power station may be necessary if Parliament agreed to the Government's power development proposals. Ansett and TAA were granted permission to start a twice weekly service between Hobart and Christchurch on 3 December 1980. The Minister for Housing, Mr Baldock, announced a new, no-deposit, low interest loan housing scheme from the Agricultural Bank for low income earners. The Gordon-above-Olga power scheme was passed by the House of Assembly. The first direct flight from Hobart to Christchurch was made by Ansett Airlines. The Australian Bureau of Transport Economics recommended that a two-ship passenger and freight service between Westernport Bay (Victoria) and Burnie be introduced. The Upper House Select Committee recommended the HEC's proposed Gordon-below-Franklin Scheme and rejected the Government proposed Gordon-above-Olga Scheme. A State constitutional crisis arose as the Legislative council voted that it had the power to change the power scheme bill to the Franklin rather than the Olga Scheme, contrary to the President's ruling.

1981 Myer Hobart employees voted to strike and picketed store entrances in support of Launceston

colleagues after a decision to open for all day Saturday trading had been made. A decision was made to close Electrona Carbide Works. A \$2.4 million expansion of United Milk Products at Wynyard was announced. The Longford folk festival attracted 5 000 people. The Royal Hobart Hospital was forced to close two wards due to an outbreak of the antibiotic-resistant germ, *staphylococcus aureus* or 'golden staph'. The Moonah branch of ANZ bank was held up by two armed men who escaped with more than \$17 000. Bushfires at Zeehan destroyed 40 homes, a hall, machinery and cars—estimated damage \$5 million. Myer Hobart employees voted to strike indefinitely over the Saturday trading issue. All day Saturday trading was abandoned after a truce in the trading hours battle. A major archaeological discovery of stone tools and animal bones was made in the state's South-West. Tasmanian Film Corporation's production *Manganinni* won the major award at the Festival Lumiere at Lyon, France. Fires threatened the historic town of Stanley. It was revealed that the cost of the Pieman River power scheme had increased to \$558.5 million. Interdominion pacing championships commenced in Hobart. Tasmania experienced its hottest summer in 20 years with many centres reaching record temperatures. The Federal Government announced major airfare increases on short routes which angered tourist and business interests in Tasmania. The Premier, Mr Lowe, suggested a referendum to resolve the State's next power scheme. The State Government banned Saturday afternoon trading by companies employing more than 100 people on a statewide basis. A 12 year old Penguin boy was found guilty of manslaughter by a Supreme Court jury at Burnie. The State Government formed a 'Razor Gang' to find ways to reduce Government expenditure. Royal Hobart Hospital announced decision to close two wards and an operating theatre at the end of the month, as a cost-cutting measure. Six Tamar municipalities declared opposition to the State Government's amalgamation proposals for nine Northern municipalities. Launceston shipbuilding firm, Tamar Steel Boats Pty Ltd won a \$10 million contract to build three tugs for a Sydney company. Tasmania's municipal councils united in a bid to thwart the State Government's plan to amalgamate Tamar Valley municipalities. The Federal Government agreed to subsidise airfares to and from the state by 10 per cent following acceptance of the Holcroft report. The State Government announced the boundaries for the new Franklin-Lower Gordon Wild Rivers National Park to be proclaimed when the Gordon-above-Olga power scheme was approved by Parliament. 24 hour strike by airline hostesses stopped all flights to and from Tasmania. Winds, gusting at more than 100 k.p.h. swept Tasmania causing thousands of dollars worth of damage. The State was visited by Prince Charles who presented Devonport with its charter of city status. Another strike by air hostesses again disrupted all flights in Australia. The first balloon crossing of Bass Strait from Victoria to Smithton was completed in 10 hours. Launceston textile firm, Waverley Woollen Mills, announced its production to be phased out during the next three months resulting in 50 retrenchments. Charles Davis took over the wholly Tasmanian based company G.P. Fitzgerald & Co. Ltd. Fire swept through the Top Form Furniture Industries factory at Glenorchy resulting in damage estimated at more than \$1 million. Carbon dating of stone-tools found in Tasmania's South-West proved that primitive man was in Tasmania before the glacier stage of the last ice age. Coles opened all K-marts and 10 New World Supermarkets throughout Tasmania in defiance of the Act which prohibited those shops employing more than 100 workers from opening between the hours of noon Saturday and 9 a.m. Monday. The State Government announced the end of free public hospital treatment in Tasmania. Drought breaking rains persisted throughout the State bringing relief to farmers suffering the long dry spells in the Midlands, East Coast and South East regions. Boral Gas Ltd announced plans to build a \$2 million storage facility for liquid petroleum gas in the Burnie-Devonport area. Launceston Gas Co. said it planned an ocean gas terminal in the area. The State Government decided to prosecute G.J. Coles supermarkets and K-marts for allegedly breaching the *Shop Trading Hours Act* by opening beyond noon on Saturdays. A rowdy meeting of more than 400 HEC workers called on the Premier, Mr Lowe, to resign or call an election over Tasmania's next power scheme. The Grants Commission proposed that \$64 million be cut from Tasmania's general revenue allocation. The Commission's recommendations were deferred for a year during which time the Commission was instructed to re-open its inquiry and take further evidence. Executive Director of the Master Builders Association, Mr Ewen Nichols claimed that the Tasmanian building industry was near collapse following the retrenchments of 1 500 people from the industry during the past two years. Altered Legislative Council boundaries came into force after the 1981 Legislative Council elections. Premier, Mr Lowe, announced that Tasmania's Agent General's Office in London would be abolished and Tasmania House closed from 30 September. The Australian Labor Party's State Council directed Mr Lowe, to halt Tasmania's power deadlock and to hold a referendum on the issue. Arthur B. Moore Pty Ltd, one of Tasmania's biggest construction firms, crashed owing \$1.9 million to approximately 400 creditors. A mini-budget announced by the Premier and Treasurer, Mr Lowe, saw the increase of 18 government charges. A 'crisis conference' on the construction industry, organised by the Master Builders Association of Tasmania, was held to determine a strategy to assist the recovery of the building industry which was facing its greatest crisis in 30 years. Woolworths Ltd gained a controlling interest in the big Tasmanian supermarket chain, Purity Distributors. East West Airlines, the Sydney-based Fokker specialist, was to take over TAA's North-west Coast air services from 1 February 1982. A Senate Select Committee recommended the abolition of the two-airline agreement for Tasmanian air services and the upgrading of the ferry services to the mainland. The Minister for Energy, Dr Amos, called for either a referendum or a free vote to solve the eight month deadlock over the power scheme issue. A last minute \$1 million takeover by a Victorian company

saved Launceston's Waverley Woollen Mills from closure. Federal Minister for Tasmania, Mr Newman, announced that the Tasmania-New Zealand air link would continue indefinitely. Approximately 3 000 pro-wilderness demonstrators marched peacefully against the construction of dams in the South-west region. Dame Enid Lyons, widow of former Prime Minister Joseph Lyons, and Australia's first woman Federal Member of Parliament and Cabinet Minister, died at Ulverstone at the age of 84. A new state finance corporation was to replace the Agricultural Bank of Tasmania. The State Budget was announced—a fuel tax of 1.6 cents per litre of petrol was implemented. A referendum was announced for November concerning the State's next power development. Mr Lowe retracted his statement that three options would be available in the referendum and stated that the Government could not have supported the no-dams course if it had won majority support. An appeal by retailer G.J. Coles Pty Ltd against a conviction for breaching the *Shop Trading Hours Act* was rejected by the Hobart Supreme Court. The Minister for National Parks and Wildlife, Mr Lohrey, was dismissed by the Premier, Mr Lowe, for publicly supporting a report which claimed hydro power was not Tasmania's cheapest energy alternative and recommended a thermal power station fuelled by coal. Conservationists launched their referendum campaign by demanding the reinstatement of Mr Lohrey. State Government Caucus decided to meet to discuss the party split and the threat of resignations by rank and file members of the no-dams issue. The Legislative Council approved a bill to extend daylight saving for an extra three weeks for the next two years. The Tasmanian Public Service Board announced a quarterly wage adjustment plan. Aspect House was saved from closure when the Federal and State Governments agreed to contribute \$50 000 to run a respite care service in Hobart for severely handicapped children. The Upper House was forced to make a compromise over the dams referendum after the Government threatened to call off the poll. A major study by the committee of inquiry into electricity generation and the sharing of power resources in south east Australia found that it would be uneconomic to connect Tasmania to the electricity generation of Victoria and New South Wales. The Leader of the Opposition, Mr Geoff Pearsall, resigned from party leadership. Mr Robin Gray was elevated from the deputy leadership and Mr Max Bingham was elected deputy leader. The Premier, Mr Doug Lowe, was deposed and Mr Harry Holgate replaced him as Premier. Mr Lowe resigned from Cabinet, Caucus and the ALP and took his place in the House of Assembly next to Australian Democrat, Dr Norm Sanders. The Government survived a no-confidence motion. The next Governor of Tasmania was to be Sir James Plimsoll. The State Labor Government lost its majority in the House of Assembly with the resignation of a supporter of Mr Lowe, Mrs Mary Willey. The Government survived another no-confidence motion. The Tasmanian Conservation Foundation called for an informal vote in the referendum by writing 'no dams' on the ballot paper. A Royal Commission was appointed to investigate the powers of the Legislative Council. State Public Service unions were informed that the State could not afford pay rises in line with the CPI index. Legislation for random breath tests for drivers was introduced to the Legislative Council. A report by Sir George Cartland attacked managerial skills of the State Public Service and recommended reform at every level. The State Government pledged that a dam would be built in the South-west whatever the referendum result. The referendum resulted in an extremely large informal vote but most supported the Gordon-below-Franklin option. State Parliament prorogued until 26 March 1982 without considering the results of the power referendum. The Liberal Party offered not to support a no-confidence motion until after the passage of the legislation to dam the Franklin River.

1982 See Appendix following Chapter 19.

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See also the Index of Special Articles which precedes the General Index at the back of this Year Book for a listing of historical articles included in the various editions of the *Tasmanian Year Book* (entered under 'Historical Articles').

CHAPTER 2

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Chapter 2

PHYSICAL ENVIRONMENT

GENERAL DESCRIPTION

Location and Area

The State of Tasmania is a group of islands lying south of the south-east corner of the Australian mainland; the major island is Tasmania and the more important of the lesser islands are King, Flinders and Bruny. Roughly shield shaped with the greatest breadth in the north, the Tasmanian mainland extends from $40^{\circ} 38'$ (the official northern boundary of Tasmania is $39^{\circ} 12'$) to $43^{\circ} 39'$ south latitude and from $144^{\circ} 36'$ to $148^{\circ} 23'$ east longitude. The coastline is bounded by the Southern Ocean on the south and west and the Tasman Sea on the east, while the approximately 240 kilometres wide Bass Strait separates the island from the Australian mainland. Macquarie Island, a part of the State, is situated at $54^{\circ} 38'$ south latitude, $158^{\circ} 53'$ east longitude and is bounded by the Southern Ocean.

The area of the whole State, including the lesser islands, is 68 300 square kilometres or about 0.9 per cent of the total area of Australia (7 686 900 square kilometres); it is just under one-third the size of Victoria, the smallest mainland state, and is less than half the size of England and Wales.

Mainland Australia, extending as it does well north of the Tropic of Capricorn, and with much of its area in the zone of the sub-tropical anti-cyclones, is basically a warm, dry continent. Tasmania is in the temperate zone and practically the whole island is well watered with no marked seasonal concentration; there are no deserts or drought areas as found extensively on the adjacent mainland. Being south of latitude 40° , it is on the edge of the wind belt commonly known as the *Roaring Forties* and, with South America the nearest land mass to the west, Tasmania's weather is subject at times to strong winds and heavy rain about the south and west coastal areas. Because Tasmania is the most southern state, there is a tendency to think of it as being close to the Antarctic but its latitude is matched, in the northern hemisphere, by that of Madrid (Spain) and Pittsburgh (U.S.A.). In addition, as Tasmania is an island, it is sheltered from the extremes of heat and cold experienced in these two centres. The effect of its insular position is illustrated by the variation between summer and winter mean temperatures in coastal towns—this rarely exceeds 8° Celsius. Comparing Hobart (Tasmania) with Melbourne (Victoria), mean maxima are some 3°C warmer and mean minima 1.5°C warmer in the Victorian capital.

Apart from the Great Dividing Range in the east, continental Australia is predominantly a land of low plateaux and plains with little relief. By way of contrast, Tasmania could legitimately be called the island of mountains, since it has the largest proportion of high country to its total area, compared with the other states. The distinctive feature of the island is not so much the height of the mountains—few exceed 1 500 metres—but rather the frequency with which they occur. The *Australian Pilot*, Vol. 11 describes Tasmania as 'probably the most thoroughly mountainous island on the globe'.

Principal Physical Features, Tasmania

The following table lists the principal mountains, lakes and rivers of Tasmania (for their locations see the previous map):

Principal Physical Features

<i>Mountains</i>			
<i>Name</i>	<i>Height (metres)</i>	<i>Name</i>	<i>Height (metres)</i>
Mt Ossa	1 617	Mt Gould	1 491
Legges Tor	1 573	Mt Jerusalem	1 491
Barn Bluff	1 559	Mt Olympus	1 447
Mt Pelion West	1 554	Frenchmans Cap	1 443
Cradle Mountain	1 545	Mt Ironstone	1 443
Stacks Bluff	1 527		
<i>Lakes</i>			
<i>Name</i>	<i>Area (square kilometres)</i>	<i>Name</i>	<i>Area (square kilometres)</i>
Lake Gordon (a)	272	Lake Sorell	52
Lake Pedder (b)	241	Lake King William (a)	41
Great Lake (c)	158	Lake Echo (c)	41
Arthurs Lake (c)	64	Lake St Clair	28
<i>Rivers</i>			
<i>Name</i>	<i>Length (kilometres)</i>	<i>Name</i>	<i>Length (kilometres)</i>
South Esk (d)	201	Huon	170
Gordon	185	Mersey	146
Derwent	182	Arthur	113

(a) Man-made.

(b) Man-made—inundated the much smaller natural Lake Pedder.

(c) Natural lake enlarged by dam(s).

(d) From source to confluence with North Esk; at this point the river becomes known as the Tamar. If the Tamar is included the length of the South Esk is a further 70 km.

PHYSIOGRAPHY

Introduction

Tasmania is an island of mountains and is unique among Australian states in being predominantly influenced by polar maritime air masses. From the point of view of settlement and development, these two factors have combined to create assets against which must be weighed certain liabilities. The island, a mere 296 kilometres from north to south and 315 kilometres from east to west, has a wide variety of mountains, plateaux and plains, of rivers, lakes, and tarns, of forest, moorland and grassland, of towns, farms and uninhabited (and virtually unexplored) country. The temperate maritime climate partly explains Tasmania being called the most English of all states but other factors operate to heighten the comparison—the pattern of agricultural settlement with orchards, hedges and hopfields; the lake country; the early freestone architecture still common in the east and south east and the roadsides and villages dotted with oaks, elms and poplars. Nature and the early settlers have provided the assets for a flourishing tourist industry which is currently being vigorously developed. Assured rainfall and mountain storages have also given birth to development of hydro-electric power and, indirectly, to industry. The growth of forests, too, is promoted by suitable rainfall and temperature, and this forms the basis for industries such as timber-milling, newsprint and other paper production and wood-chipping.

The mountainous nature of the island is confirmed by surveys, which shows six features exceeding 1 500 metres, 28 exceeding 1 220 metres and with a substantial part of the Central Plateau above 900 metres. The highest mountain is Mt Ossa (1 617 metres) some 16 kilometres north-west of Lake St Clair, and north-west again from this peak lie Mt Pelion West (1 554 metres), Barn Bluff (1 559 metres) and Cradle Mountain (1 545 metres). In the Ben Lomond area, the principal features are Legges Tor (1 573 metres) and about 10 kilometres south, Stacks Bluff (1 527 metres). Each of these mountainous regions and a number of others have been set aside as national parks, two of which, Ben Lomond and Mt Field, are renowned for winter sport.

Water Resources

Fresh-water navigation has played very little part in Tasmania's development, the rivers being too fast-running, shallow or short. Of the four major ports, three are located on tidal estuaries—Hobart on the Derwent; Launceston on the Tamar and Devonport on the Mersey (Burnie has built a port on the open sea, protected by breakwaters). Rivers, however, are significant for three reasons: (i) use of headwaters for electricity generation; (ii) domestic and industrial water supply; and (iii) irrigation. Hobart, for example, draws much of its water supply direct from the upper River Derwent without use of a dam and the river flow is adequate to service a population at least 10 times greater than that at present. The development of hydro-electric power has been based on full utilisation of the sources and tributaries of the Derwent with a chain of power houses stretching from Clark Dam on Lake King William to Meadowbank only 51 kilometres from Hobart. The naturally southward draining Great Lake waters are diverted northwards through the Poatina power station and discharged into the South Esk River system. The waters of the South Esk have been further harnessed at Trevallyn. In the north-west, the Mersey-Forth scheme exploits the Fisher, Mersey, Wilmot and Forth Rivers in a development spread over approximately 2 070 square kilometres. Stage I of the Gordon River power development scheme in the south-west was completed in 1978, creating the largest fresh-water storage in Australia and Stage 2 commenced in 1982. This does not exhaust the possibility of future hydro-electric development, as construction work on the Pieman River system is well advanced with completion scheduled for 1986, and the Franklin and King Rivers also have substantial potential for power development.

To obtain a true perspective, it should be appreciated that large areas of the State cannot be cultivated because there is too much rainfall (in contrast with the mainland of Australia where often the reverse situation applies). Further, the mountainous terrain and accompanying highland climate have restricted farming to relatively small areas of suitable country, mainly river valleys, coastal plains and the lower plateaux. In 1981, farm statistics showed that 33 per cent of the State's area was occupied by rural holdings. Only 3.8 per cent of the area of rural holdings was under crop and a further 40.7 per cent under sown pasture. The remaining 55.6 per cent of rural holdings included bush runs, uncleared scrub or possibly land unsuitable for any rural purpose at all. A high proportion of the State's area not included in rural holdings is composed of forests, national parks, subalpine moorland and lakes.

Physiographic Regions

The physiographic regions of the State are as follows:

Central Plateau: The main feature is a relatively undissected, dolerite-capped plateau sloping generally south-eastward from an average level of 1 065 metres in the north to 610 metres in the south, and drained almost wholly by the Derwent system. The northern and eastern boundaries of the Plateau are the Great Western Tiers (paradoxically named since they lie in the central north of the island). This is known as the 'lake country' of the island and is one of the chief sources of hydro-electric power.

High Dissected Plateau: West of Lake St Clair, dolerite caps steeply-tilted sediments and the plateau is much dissected; it comprises a series of peaks and broken ridges. The coastlands in the extreme south of the region are rugged but in the D'Entrecasteaux

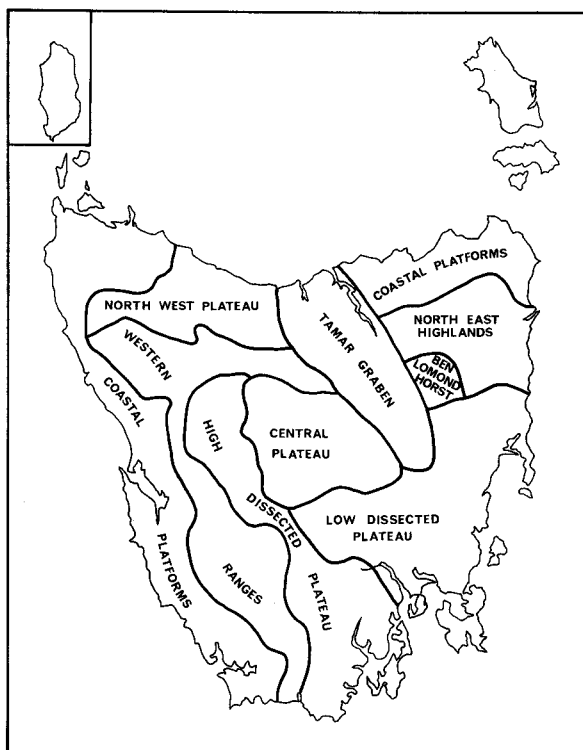
Channel and Huon River areas, narrow coastal belts have been devoted to specialised agriculture.

Western Ranges: The high dissected plateau is bounded by a series of mountain ranges running parallel to the west coast and in this region are located the State's principal mines. The south of the region is virtually uninhabited except for the township of Strathgordon.

Western Coastal Platforms: Throughout almost the entire length of the west coast, an uplifted and much dissected peneplain slopes westward from about 275 metres altitude, ending abruptly in cliffs more than 30 metres high. In the south of this region, superhumid button grass plains predominate, and the area is uninhabited. On the coastal plain south of the Arthur River, however, dairy cattle are wintered on agistment runs, while north of the river dairying begins to appear and swamps formed by recent emergence have been cleared for farming.

North-West Plateau: North of the Western Ranges lies a plateau averaging nearly 610 metres altitude and important mainly for forestry; the coastlands derive mainly from basalt, giving rise to intensive mixed farming based on dairying, potatoes and crops for canning and freezing, such as peas and beans.

Tasmania's Physiographic Regions



The above regions derive from a classification by J. L. Davies, M.A., PhD., University of Tasmania.

Tamar Graben: This graben (rift valley) is the largest plain and the leading agricultural and pastoral district in the State; it ends in the drowned inlets of the Tamar and Mersey estuaries and of Port Sorell, in the north.

North-East Coastal Platforms: This region consists of undulating lowland but the soils are acidic and the land is used only for grazing.

North-East Highlands and Ben Lomond Horst: This region comprises mostly up-lifted remnants of old fold mountains dominated by the 1 525 metre dolerite-capped plateau horst of Ben Lomond, an outlier of the Central Plateau. Here agriculture is largely confined to small basalt-derived basins. Some minerals are worked.

Low Dissected Plateau: In the south-east lies a low dissected dolerite plateau averaging perhaps 365 metres and used mainly for grazing. The northern coastlands of this region are narrow and also devoted to sheep, but the southern coastland is important for its specialised agriculture. At the extreme south of the region is the drowned estuary of the Derwent and the Tasman and Forestier Peninsulas.

DESCRIPTION OF STATISTICAL DIVISIONS

Introduction

Earlier in this chapter the State of Tasmania was briefly described by analysing its terrain in terms of physiographic regions. For statistical purposes, the State is also analysed in divisions but these do not necessarily coincide with physiographic regions, one reason being that the former are basically groupings of whole municipalities. The traditional Tasmanian statistical divisions, in use for over 50 years, were exposed to searching scrutiny in 1971 and the decision was taken to introduce a new structure, to be applied to statistics in respect of periods commencing on or after 1 July 1972.

History of Statistical Divisions

The grouping of administrative areas into divisions for statistical purposes can be found in annual volumes of the *Statistics of Tasmania* dating back to the nineteenth century. The administrative areas included: police districts; registration districts; electoral districts; and municipalities. The boundaries of these areas were subject to periodic changes. The *Local Government Act* 1906 provided a basis for the whole State coming under uniformly constituted local government and gradually the divisional grouping of administrative areas was confined, to official statistics, to municipalities. As a result of this Act, fixed local government area (municipality) boundaries were delineated in 1907 by a commission specially set up for the purpose. The new boundaries have remained broadly unchanged since 1907 although there have been numerous relatively minor boundary changes. One exception is that the old municipalities of 'Hobart', 'Queenborough' and 'New Town' were combined to form the new municipality of 'Hobart' in 1919. The names of several municipalities have also been changed since 1907. Small area statistics relating to 1907 and earlier years are not generally comparable with later statistics produced by the Bureau due to the boundary changes in 1907.

In 1919, groupings of local government areas used were very similar to those still used in 1971; in some series Hobart, Launceston and Glenorchy were separately specified as components of an 'Urban Division' distinct from the region in which each was located.

The basis for these 1919 groupings can only be inferred since no specific criteria were specified in the records. The Western Division clearly combined the 'west coast' mining municipalities into one entity; the Southern Division seemed to be based on orcharding, small fruit and hop areas; while the South Eastern Division was allied more with pastoral and grazing areas. In short, the main determinant may well have been similarity of rural activity (with the Western Division a special case because of its mining activity).

After the 1966 population census, a new division was formed with the title Hobart Division, comparable with similar capital city divisions in other states; its boundaries were drawn wide enough to encompass the expected expansion of the inner urban area for a period of 20 to 30 years. Apart from this, the broad divisional structure in 1971 was very much the same as it had been in 1919.

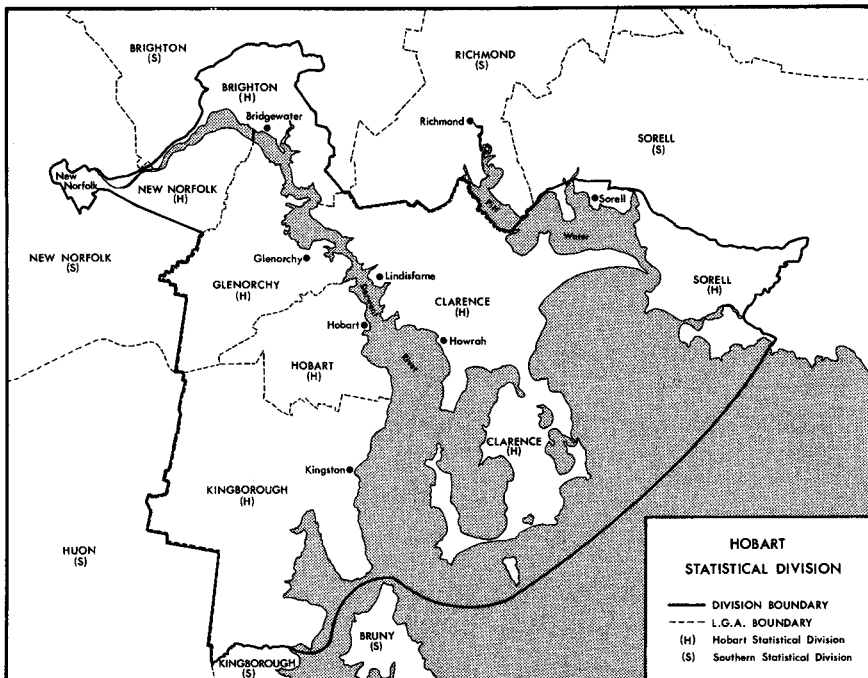
In 1972 a new statistical division structure, using the three principal urban centres of influence as a basis, was designed. The three urban centres and their areas of influence were: (i) Hobart—South and South-East; (ii) Launceston—North and North-East; and (iii) Burnie—Devonport—North-West and West. The following divisional structure was then adopted: (i) with Hobart as focus—Hobart and Southern Divisions; (ii) with Launceston as focus—Northern Division split into Tamar and North Eastern Sub-divisions; and (iii) with Burnie-Devonport as focus—Mersey-Lyell Division split into North Western and Western sub-divisions.

Outline of the Present Structure

The divisions in the new structure are as follows:

Hobart Division

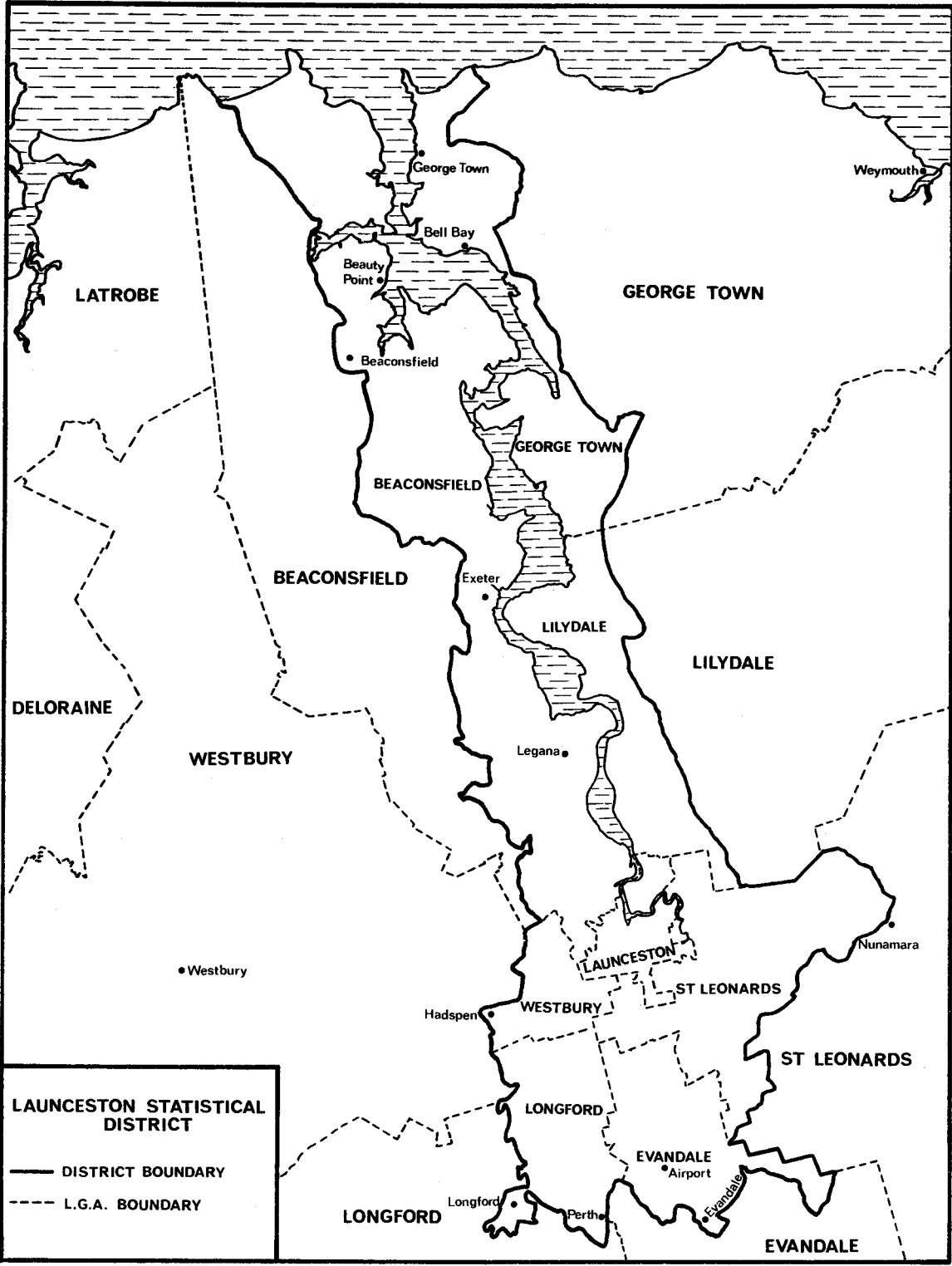
This Division comprises Hobart and Glenorchy Cities, the municipality of Clarence, and parts of four other municipalities: Brighton; Kingborough; New Norfolk; and Sorell. The Division is Tasmania's principal industrial region and the administrative focal point. The Hobart Division boundaries were drawn wide enough to contain the expected outward growth of the inner urban area for a period of 20 to 30 years.

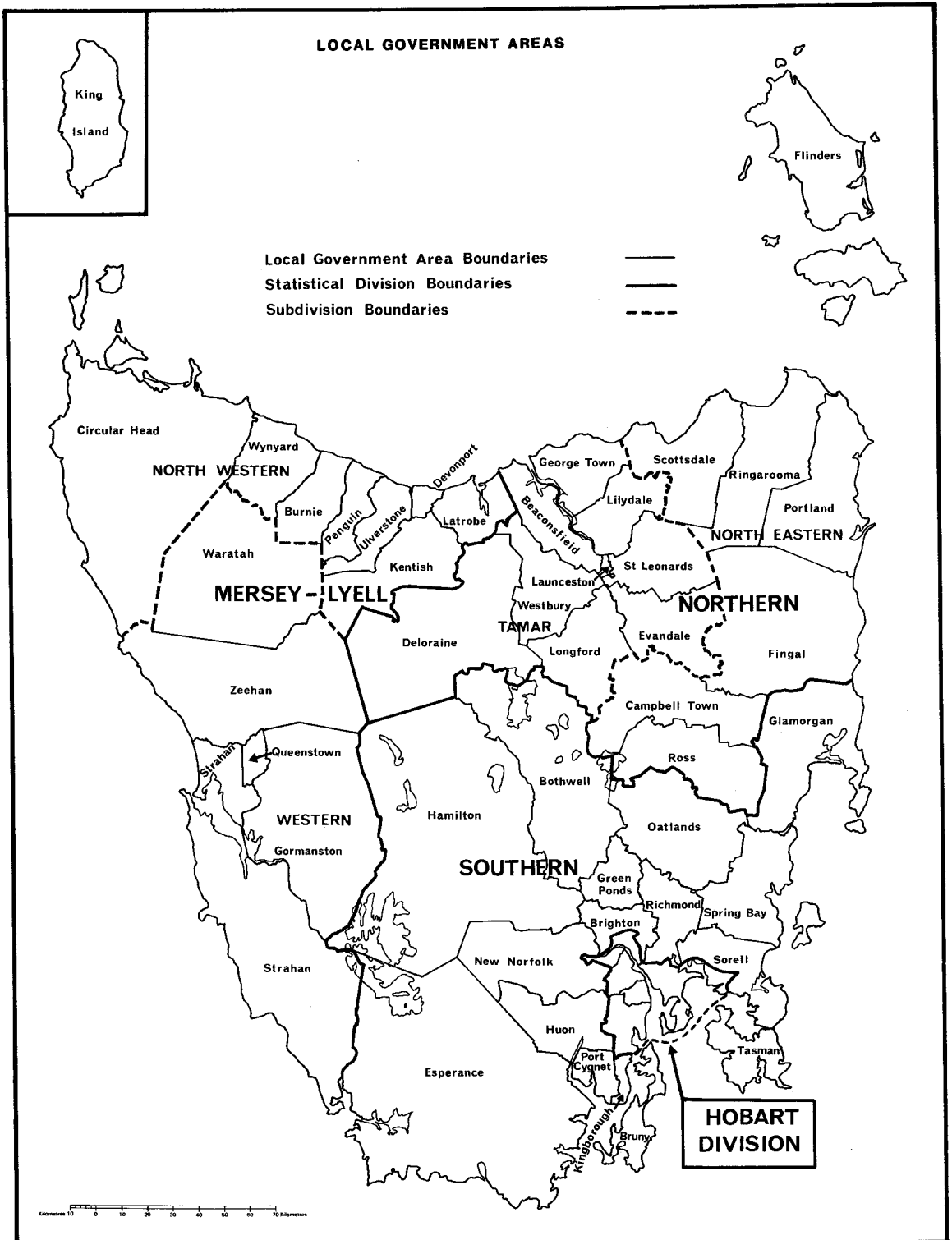


One important component of the Hobart Division is Urban Hobart, defined as the densely settled contiguous parts of the cities of Hobart and Glenorchy, and of the municipalities of Clarence and Kingborough. The boundaries of Urban Hobart and of the Hobart Division do not conform with borders defining local government areas. (The details of these boundaries are given in Chapter 6 'Demography' under 'Populations Centred on Hobart and Launceston'.)

Southern Division

Comprises the southern local government authority areas which have Hobart as their urban focus. Predominant activities include orcharding, sheep and cattle grazing, forestry and timber processing.





Northern Division

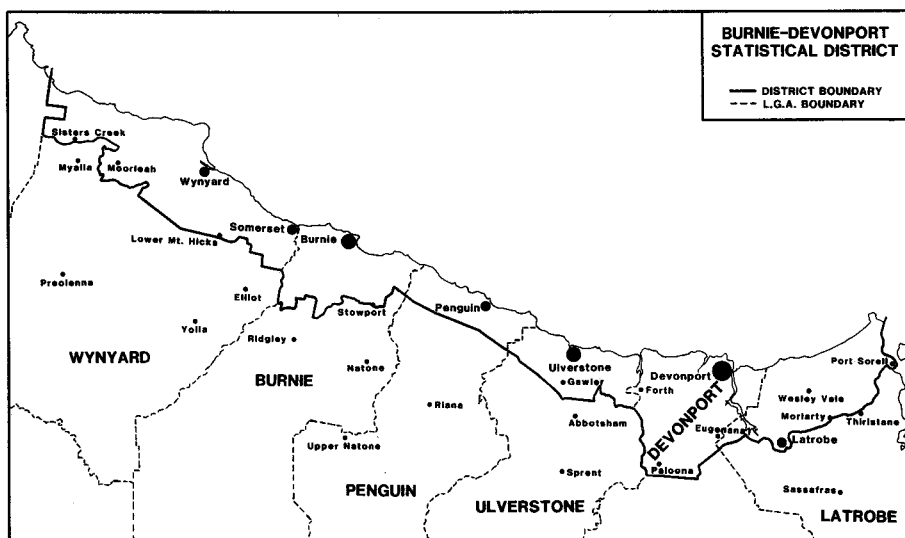
The Northern Division is the region with Launceston as its urban focus.

(i) *Tamar Sub-division*: This is the region dominated by the Tamar Valley. In the centre of this area is Launceston and its suburbs (known as Urban Launceston). This Sub-division includes several major manufacturing industries, port facilities of the northern region and agricultural, pastoral, dairying and forestry industries.

Launceston Statistical District: A new boundary delineating the Launceston Statistical District was drawn for the purpose of presenting results of the 1976 Population Census. The boundary was drawn to contain the area of expected urban growth over the next two decades and includes the City of Launceston and parts of seven other municipalities as shown in the accompanying map.

Urban Launceston is defined for statistical purposes as the City of Launceston plus the contiguous urban parts of the following municipalities: Lilydale, St Leonards, Evandale, Westbury and Beaconsfield.

(ii) *North Eastern Sub-division*: Comprises the outer seven municipalities of the Northern Division. Principal activities include agriculture, dairying, sheep and cattle grazing, forestry and some mining.



Mersey-Lyell Division

This division encompasses the north-west and western portions of the State. The region has a twin urban focus of Burnie-Devonport.

(i) *North Western Sub-division*: Comprises the municipalities stretching along Bass Strait from Latrobe to Circular Head plus Kentish and King Island. The Sub-division includes several major manufacturing industries and is a principal agricultural, pastoral, dairying and forestry area for the State.

Burnie-Devonport Statistical District: As with the Launceston Statistical District the Burnie Devonport Statistical District was drawn to contain the area of expected urban growth over the next two decades. It includes the whole of the municipality of Devonport and parts of the municipalities of Wynyard, Burnie, Penguin, Ulverstone and Latrobe.

(ii) *Western Sub-division*: Contains Tasmania's western municipalities where mining activities predominate.

AREA OF STATE

Sovereignty

On 17 December 1975, the High Court of Australia announced its decision on an action by the six states challenging the validity of the federal *Seas and Submerged Lands Act*. This Act gives the Federal Government sovereignty over the Australian territorial sea, air space, sea-bed and subsoil; and over the continental shelf beyond the limits of the territorial sea. In their action, the state governments claimed that the sovereign powers given the states over their land mass included sovereignty over the territorial sea adjacent to their coastlines for a distance of at least 3 miles (4.8 km). The full bench of the High Court dismissed the action by the states and upheld the validity of the *Seas and Submerged Lands Act*. Prior to this decision, Tasmania had claimed sovereignty (including mining and fisheries jurisdiction) over an area bound by the approximate rectangle 39° 12' to 45° south latitude and 140° to 150° east longitude.

Since the boundary line between Tasmanian and Victorian sovereignty is defined as 39° 12' south latitude, numerous Bass Strait Islands, the chief being the Furneaux group, King Island and the Fleurieu, Hogan, Curtis and Kent groups, are part of Tasmania. In effect some Tasmanian territory (Rodondo and West Moncoeur Islands) is located only 13 to 16 kilometres from the Victorian coast.

Macquarie Island, site of an Antarctic research station, is also part of the State of Tasmania and is situated in 54° 38' south latitude, 158° 53' east longitude; its area is included in Esperance, a State coastal municipality.

Area of Major and Minor Islands

The official area of the State of Tasmania including many smaller islands (based on a 1963 survey) is 68 331 square kilometres (6 833 100 hectares). The next table shows the area of the main islands and the municipalities to which they belong:

Area of Islands		
<i>Island</i>	<i>Area (square kilometres)</i>	<i>Municipality</i>
Bruny	362	Bruny (a)
King	1 099	King Island (a)
Flinders	1 374	Flinders (a)
Prime Seal	10	Flinders (a)
Badger	10	Flinders (a)
Vansittart	6	Flinders (a)
Cape Barren	445	Flinders (a)
Clarke	113	Flinders (a)
Three Hummock	70	Circular Head
Hunter	74	Circular Head
Robbins	101	Circular Head
Maria	101	Spring Bay
Schouten	34	Glamorgan
Macquarie	123	Esperance
Total islands	3 922	
Mainland Tasmania	64 409	
Total Tasmania	68 331	

(a) Island municipality.

LAND TENURE

Introduction

Tasmania was proclaimed as Crown property when the first settlers arrived in 1803. In the period since their landing 36.5 per cent of the State's total area has been alienated

by grant or sale; the Crown still owns 62.1 per cent and the residual 1.4 per cent is in the process of alienation (i.e. being purchased from the Crown by instalment payments).

Crown Lands

The following table classifies the area of the State by ownership (i.e. alienated or Crown). (For details of land alienation from 1820 see the 1977 and earlier Year Books.) Crown forestry reservations, apart from one component, is land used or to be used exclusively for forestry purposes; the exception is the forested area of recreation and conservation reservations. The forestry reservations account for 32.5 per cent of the State's area.

Alienation and Occupation of Crown Lands, Tasmania at 30 June
(^{'000 Hectares})

Classification of land	Area				
	1976	1977	1978	1979	1980
Alienated (aggregate) (a)	2 751	2 743	2 517	2 494	2 487
In process of alienation (a)	154	146	120	96	90
Crown Lands—					
Leased or licensed—					
Through Lands Department (a)—					
Pastoral	170	105	102	83	n.a.
Other (b)	12	9	8	9	n.a.
Through Mines Department (c)	47	49	55	56	54
Total	229	163	165	148	n.a.
Forestry reservations (d)—					
State forests	1 474	1 475	1 494	1 518	n.a.
Other (e)	567	704	702	702	n.a.
Total	2 040	2 179	2 196	2 220	n.a.
Other Crown land (a)	1 656	1 599	1 832	1 872	n.a.
Total area of State	6 830	6 830	6 830	6 830	n.a.

(a) Estimates only.

(b) For closer settlement and soldier settlement, and short-term.

(c) Includes a small area of private land leased through the Mines Department.

(d) Includes areas under pulpwood concessions and exclusive forest permits; see Chapter 13 for further details.

(e) Includes estimated forested component of State reserves.

Although the possibility of rapidly alienating more Crown land for farming purposes on any large scale may seem remote, it should be noted that a large proportion of Crown land is nevertheless of importance to the State's economy, specifically for forestry and tourism purposes.

National Parks and Wildlife Service

The *National Parks and Wildlife Act* 1970 repealed the *Animals and Birds Protection Act* 1928 and the *Scenery Preservation Act* 1915 and placed the management and control of parks, reserves, fauna and flora in the hands of a single authority, the National Parks and Wildlife Service.

This authority has wide-ranging powers covering the management of parks, protection of fauna and flora, regulation of hunting, protection of Aboriginal relics, conduct of research, dissemination of information about conservation and enforcement of regulations under the *National Parks and Wildlife Act* and *Aboriginal Relics Act*. It is responsible for the planning and management of State Reserves (including national parks, nature reserves, Aboriginal sites and Historic sites), Game Reserves and Conservation

Areas. State Reserves are the most highly protected category, in which no other authorities can exercise their powers except with the special approval of Parliament. Conservation Areas are set aside for the protection of flora and fauna (though other activities can also occur), while Game Reserves, a category introduced in 1977, permit controlled hunting of game or commercial species.

The Service is conducting surveys of selected marine areas around Tasmania with a view to the establishment of marine parks and, with the application of the Federal *Historic Shipwrecks Act* to waters off Tasmania in February 1982, became the State agency responsible for implementation of that Act. Through its National Estate Division the Service is also responsible in Tasmania for administration of National Estate grants provided by the Australian Heritage Commission. Specialist advisory committees including representatives of other authorities, community groups and the general public assist the Director and Minister in a number of fields.

The value and significance of the areas managed by the Service are increasing rapidly as the public becomes more conscious of the need for protection of our environment, as pressure for exploitation increases on our finite natural resources and as tourism increases its significance as a major source of income and employment for the State. Pressures for development are unfortunately leading to conflicts over resource use, particularly in relation to our forests and to the South-West of the State. The next few years will be crucial in determining whether the value of our national parks and reserves are fully appreciated and those natural and cultural features which give Tasmania its unique character are to be protected and cherished.

State Reserves

The following gives a brief description of the principal State reserves:

Asbestos Range National Park: Easily accessible from Launceston and Devonport, this park caters for family recreation. The park extends along the north coast from Port Sorell to Greens Beach at the mouth of the Tamar. The vegetation includes eucalypt forests and coastal heathlands, as well as grassed areas which provide good grazing for many native animals including the reintroduced forester kangaroo.

Ben Lomond National Park: Is located 45 kilometres south-east of Launceston. This high plateau area includes Legges Tor and is Tasmania's principal skiing area. Walking and climbing are other popular activities in this park. The area is geologically interesting as Ben Lomond was the only part of N.E. Tasmania to be affected by glaciation.

Cradle Mountain-Lake St Clair National Park: This is an area of rugged mountain scenery; it contains Tasmania's highest mountain (Mt Ossa) together with a number of major peaks, numerous lakes, deep gorges and several waterfalls. Flora and fauna in the park are representative of Tasmania's montane species and are in a largely untouched condition. The weather of the area is unpredictable and at times extremely severe—blizzards are common and may occur in mid-summer. The principal walking track extends from Cradle Valley (in the north) to Lake St Clair, a distance of 85 kilometres.

Franklin-Lower Gordon Wild Rivers National Park: This park extends from the headwaters of the Franklin River on the boundary of the Cradle Mt-Lake St Clair National Park in the north to the Olga-Davey divide (Southwest National Park boundary) in the south. It incorporates the former Frenchmans Cap National Park, Lyell Highway State Reserve and Gordon River State Reserve. The Franklin is an undisturbed wild river of world significance and offers a unique canoe or raft trip for some 120 km to Macquarie Harbour through spectacular gorges and ancient rainforest. An important recent archaeological discovery in Kutikina (or Fraser) Cave on the Franklin indicates that man lived in the region at least as long ago as 20 000 years. Cruise boats out of Strahan provide a unique trip for visitors up the Lower Gordon River, featuring magnificent views and remarkable reflections in the River's dark waters. The boundaries of this park were significantly amended in September 1982 to provide for the construction of a hydro-electric scheme on the Gordon below Franklin. The original Wild Rivers National Park, along with the Southwest and Cradle Mt-Lake St. Clair National Parks were included

in the World Heritage List in December 1982, in recognition of their international significance.

Freycinet National Park: This park, situated on the east coast, occupies the whole of Freycinet Peninsula together with Schouten Island and other offshore islands. A principal feature of the park is the 485 metres high red granite Hazards. The park provides pleasant walking throughout the year, although during summer water may be scarce.

Hartz Mountains National Park: Is located south-west of Geeveston. The main features of the park are Hartz Mountain, 1 253 metres high, several small picturesque lakes, and the superb eastward view from Waratah Lookout. The park includes a small sample of wet sclerophyll forest.

Maria Island National Park: Is situated off the east coast from Orford and may be reached by chartered boat or aeroplane. The *Maria Van Diemen* provides a daily passenger service to the island from Triabunna all year round. Principal attractions include convict ruins from two penal settlements, the main one being at Darlington on the north-west corner of the island. Forester kangaroo, Bennetts wallaby and other Tasmanian fauna have been established on the island and emu have been introduced. At the north-east corner of the island high fossil cliffs rise abruptly from the sea.

Mount Field National Park: This park, near Maydena and only 75 kilometres from Hobart, is the only southern ski resort in Tasmania and includes spectacular mountain scenery. Principal peaks are Mt Field East and West; other features include Russell Falls, Lake Dobson and numerous glacial lakes and tarns. The track to Russell Falls is a self-guiding nature walk which has been modified to make it accessible to disabled people.

Mt William National Park: Bounded on the east by long white sandy beaches of the north-east coast, this park contains the largest single sample of coastal, dry, sclerophyll forest found in any reserve. It also contains 11 of the 14 different heath communities of north eastern Tasmania, and over half the native species of Tasmanian vertebrate animals.

Port Arthur and Tasman Peninsula: This historic and scenic area is the best known and most visited tourist attraction in Tasmania. The area, in addition to the historic convict ruins of the Port Arthur penal settlement, contains many small reserves of either historic or scenic significance. Port Arthur, site of a convict settlement from 1830 to 1877, has a number of historic ruins. Recognising the importance of the site, the Federal and State Governments are co-operating in a \$9.2 million conservation program which will assure the future of the numerous buildings and ruins and will provide new insights for visitors into the history of the settlement. Other historic sites include the old convict coal mines at Plunkett Point and Eaglehawk Neck where guards were stationed and a line of dogs tethered to prevent escape from the Peninsula. This area is also renowned for its spectacular coastal landforms, e.g. the Blowhole, Devils Kitchen, Tasman Arch and the Tessellated Pavement.

Southwest National Park: Is Tasmania's largest state reserve and covers 442 240 hectares of Tasmania's rugged south-west. It is a true wilderness area and encompasses the Western and Eastern Arthur Ranges, Federation Peak, Frankland Range, Mt Anne, Precipitous Bluff, Lake Pedder, part of the rugged south coast including Port Davey and Bathurst Harbour, and adjacent offshore islands. Dense scrub, which covers much of the area, frequent harsh weather and a scarcity of cleared tracks make this area the domain of the experienced, self-contained bushwalker.

Walls of Jerusalem National Park: This area of sheer dolerite cliffs and tranquil glacial lakes lies in the north-west of the Central Plateau. A walking track climbs up the Fish River Valley from the Mersey Valley and gives access to the Walls area through Herods Gate. The spectacular scenery, plentiful fauna and sub-alpine flora, make this a very popular bushwalking area. There are two huts and numerous good campsites.

States Reserves, Conservation Areas, and Game Reserves

The following table lists the Tasmanian national parks, State reserves, historic sites, Aboriginal sites, nature reserves, game reserves and conservation areas. At 31 December

1982 the total area of State and game reserves was 916 065 hectares, while that of conservation areas was 862 034 hectares.

National Parks, State Reserves, etc. at 31 December 1982

<i>Name</i>	<i>Area (ha)</i>	<i>Location</i>	<i>Description</i>
<i>National Parks</i>			
Asbestos Range	4 281	North coast	Coastal heathland
Ben Lomond	16 526	Central north	Mountainous
Cradle Mountain—Lake St Clair	131 915	Central	Mountainous, lake
Franklin-Lower Gordon Wild Rivers ...	181 075	West	Mountainous, scenic
Freycinet	10 010	East coast	Coastal, red granite
Hartz Mountains	6 470	South	Mountainous, scenic
Maria Island	9 672	East	Wildlife, convict station
Mount Field	16 257	Central south	Mountainous, scenic
Mount William	13 806	North east	Forester kangaroo, coastal
Rocky Cape	3 050	North west	Coastal heath, banksia
Southwest	442 240	South west	Rugged wilderness
Strzelcki	4 215	Flinders Island	Mountainous, coastal
Walls of Jerusalem	11 510	Central	Sub-alpine, scenic
<i>State Reserves</i>			
Alum Cliffs	1 540	Mole Creek	Scenic gorge and cliffs
Baldock Cave	43	Mole Creek	Caves, sclerophyll forest
Bradys Lookout	1	West Tamar	River, scenic
Brown Mountain—Remarkable Cave ..	61	Tasman Pen.	Coastal, scenic
Cape Pillar	3 200	Tasman Pen.	Coastal, sclerophyll forest
Cape Raoul	2 066	Tasman Pen.	Coastal, heath
Croesus Cave	47	Central	Caves
Derwent Cliffs	5	New Norfolk	Scenic
Devils Gullet	146	North	Scenic gorge
Eaglehawk Neck—Taranna	25	Tasman Pen.	Coastal, scenic
Eugenana	1	North west	Stratified cave deposit
Exit Cave	441	South	Large cave, glow worms
Fairy Glade	39	Central north	Scenic, fern glade
Ferndene	35	North	Scenic, fern glade
Fluted Cape	259	Bruny Island	Coastal, sclerophyll forest
North Falls	55	North central	Waterfall
Gunns Plains Cave	10	North west	Caves
Hastings Caves	61	South	Caves, geology
Hellyer Gorge	569	North west	Scenic, rainforest
Henty Glacial Moraine	1	West	Geology
Holwell Gorge	121	Central north	Scenic gorge
Ida Bay	425	South East	Scenic reserve, railway
Junee Cave	20	Central north	Cave
Kentford Forest	37	King Island	Relict eucalypt forest
King Solomon Cave	164	Central north	Caves
Kubla Khan Cave	160	North central	Caves
Labillardiere	2 332	Bruny Island	Coastal, dry sclerophyll forest
Liffey Falls	101	North central	Scenic waterfall
Lookout Rock	2	East coast	Coastal, scenic
Marakoopa Cave	71	North central	Caves, geology
Marriotts Falls	121	South central	Waterfall
Mount Arthur	4	Tasman Pen.	Scenic lookout
Mount Barrow	459	North east	Mountain
Mount Barrow Falls	81	North east	Waterfall
Mount Montgomery	299	North west	Scenic
Murchison Highway	452	West	Scenic road, rain forests
Notley Gorge	11	North	Scenic fern gully
Palmers Hill Lookout	1	Tasman Pen.	Scenic
Pieman River	3 328	West coast	Scenic River
Port Davey	17	South west	Scenic foreshore' coast
Roger River	174	North west	Scenic, rainforest
St. Columba Falls	314	North east	Waterfall
St Marys Pass	273	North east	Scenic road
St. Patricks Head	150	North east	Scenic

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National Parks, State Reserves, etc. at 31 December 1982—continued

Name	Area (ha)	Location	Description
<i>State Reserves</i>			
Steppes	48	Central	Homestead, dry sclerophyll forest
Stewarts Bay	78	Tasman Pen.	Scenic foreshore
Tasman Arch	138	Tasman Pen.	Scenic, geology
Tessellated Pavement	4	Tasman Pen.	Scenic, geology
The Nut	59	North west	Scenic, geology
Thermal Springs	1	Central north	Geology
Trowutta Caves	66	North west	Caves, limestone arch
Waterfall Creek	24	Bruny Island	Scenic, forest
Zeehan—Renison Bell	110	West	Scenic Road
<i>Historic Sites</i>			
Batchelors Grave	Small	Taroona	Historic Grave
Callington Mill	Small	Oatlands	Historic mill
Coal Mines	214	Tasman Pen.	Convict mine
Currie Lightkeepers Residence	1	King Island	Historic building, museum
161 Davey Street	Small	Hobart	Historic home
D'Entrecasteaux Monument	Small	South	Historic monument
D'Entrecasteaux Watering Place	1	South	Site of early landing
Entally House	38	Central north	Historic home
Female Factory	Small	Hobart	Historic prison
George III Monument	10	South	Memorial to ship wreck, flora
Kangaroo Bluff	3	Bellerive	Historic fort
Lyons Cottage	Small	Stanley	Historic cottage
Oyster Cove	30	South	Aboriginal Station
Point Puer—Crescent Bay	53	Tasman Pen.	Historic, scenic coast
Port Arthur	113	Tasman Pen.	Convict ruins
Richmond Gaol	1	Richmond	Convict gaol
Risdon Cove	3	Hobart	Sight of first settlement
Ritchies Mill	Small	Launceston	Flour water mill
Ross Female Convict Station	1	Ross	Convict station
Sarah Island	6	Macquarie Harbour	Site of convict station
Shot Tower	3	Taroona	Historic tower
Strahan Customs House	Small	West coast	Historic building
Sydney Cove	53	Furneaux	Historic shipwreck
Tasman Monument	Small	Tasman Pen.	Historic monument
Toll House	Small	New Norfolk	Historic building
Waubadebars Grave	Small	Bicheno	Aboriginal grave
Wybalenna	126	Flinders Is.	Aboriginal station
York Town	2	North Tamar	Site of early settlement
<i>Nature Reserves</i>			
Albatross Island	33	Bass Strait	Seabird breeding
Bass Pyramid	Small	Bass Strait	Seal Breeding
Betsy Island	181	South east	Scientific reference
Black Pyramid Rock	40	North west	Seabird Rock
Chappell Islands	1 350	Furneaux	Bird Islands
Coal River Gorge	209	South	Scenic
Curtis Island	149	Bass Strait	Ecological reference
Diamond Island	5	East coast	Penquin rookery
Dismal Swamp	100	North west	Blackwood forest
East Risdon	44	Hobart, east	Rare eucalypts
Foster Islands	48	North east	Bird islands
George Rocks	5	North east	Bird islands
Green Island	5	D'Entrecasteaux Channel	Ecological reference
Green Point	22	South east	Research
Hippolyte Rocks	5	South east	Seal breeding
Hospital Creek	22	South east	Rare endemic plant
Ile des Phoques	7	East coast	Seal breeding
Isabella Island	25	Flinders	Cape Barren Goose breeding

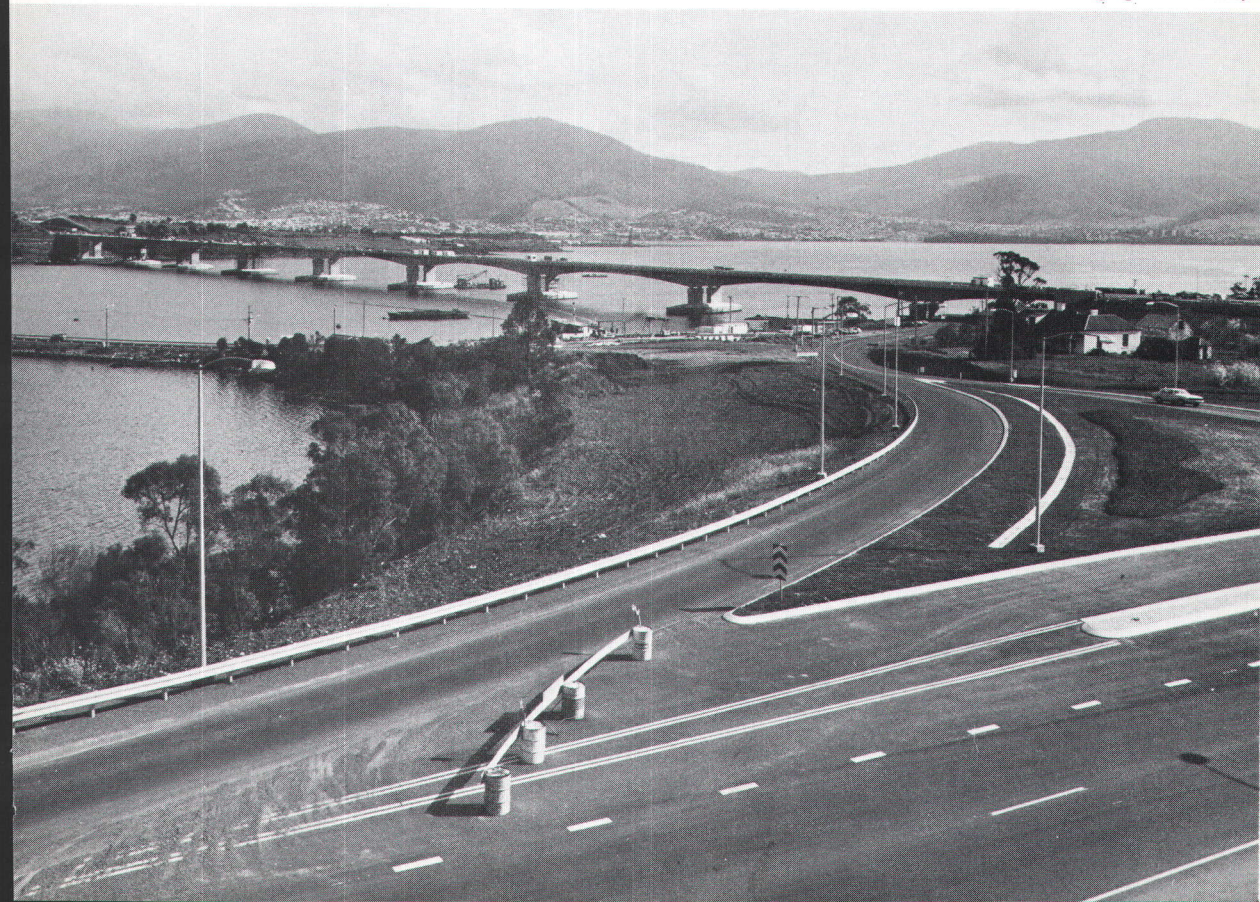
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*Crotty Road and HEC Camp, South West Tasmania
(Hobart Mercury)*

Bowen Bridge, Hobart

(Tasmanian Government Stills Photographic Section)





Battery Point, Hobart

(Tasmanian Government Stills Photographic Section)

Historic homes, Evandale



National Parks, State Reserves, etc. at 31 December 1982—continued

Name	Area (ha)	Location	Description
<i>Nature Reserves</i>			
Judgment Rocks	Small	Bass Strait	Seal breeding
Lavinia	4 622	King Island	Heath, dunes
Lime Bay	1 310	Tasman Pen.	Dry sclerophyll forest
Low Islets	8	Furneaux	Australian pelicans
Macquarie Island	12 785	Sub Antarctic	Research wildlife
Moriarty Rocks	3	Bass Strait	Seal breeding
Native Point	127	Tamar	Relict forest
North East Islet	Small	Bass Strait	Seal breeding
Penquin Islet	4	Hunter Group	Seabird breeding
Reid Rocks	Small	Bass Strait	Seal breeding
Rodondo Island	80	Bass Strait	Ecological reference
Tenth Island	1	Bass Strait	Seal breeding
The Doughboys	20	Bass Strait	Seabird breeding
Three Hummock Island	7 284	North west	Sclerophyll forest, heath
Three Sisters-Goat Island	37	North west	Seagull rookery
Truchanas	406	South west	Huon Pine forest
West Moncoeur Island	10	Bass Strait	Seal breeding
Wright Rock	9	Bass Strait	Seal breeding
<i>Aboriginal Sites</i>			
Mount Cameron West	530	West coast	Aboriginal relics
Sundown Point	132	West coast	Aboriginal relics
Trial Harbour	1	West coast	Petroglyphs
West Point	580	West coast	Aboriginal relics
<i>Game Reserve</i>			
Bird Island	65	Hunter Group	Muttonbird rookeries
Bruny Island Neck	1 450	South	Lagoons, coastal heath
Little Dog Island	50	Furneaux	Muttonbird rookeries
New Year Island	112	King Island	Muttonbird rookeries
Petrel Island	50	Bass Strait	Muttonbird rookeries
Stack Island	30	Hunter Group	Muttonbird rookeries
Steep Island	30	Hunter Group	Muttonbird rookeries
<i>Conservation Areas</i>			
Wildlife sanctuaries under National Parks and Wildlife Service Management and acquired areas—			
Asbestos Range	Small	North coast	(a)
Black Pyramid Rock	4	North west	Seabird rock
Brigg Islet	Small	Furneaux	Bird island
Cat Island	30	Furneaux	Bird island
Central Plateau	23 250	Central	Alpine vegetation
Chalky Island	36	Furneaux	Bird island
Cradle Mountain-Lake St Clair	3	North	(a)
Egg Islands	128	Huon	Estuarine, wetland
Fluted Cape	190	South	(b)
Gull Island	32	Furneaux	Bird island
Highfield	4	Stanley	Early homestead (c)
Lackrana	220	Flinders Island	Lagoons
Lake Sorell	198	Central	Sclerophyll forest
Lavinia	200	King Island	(d)
Liffey Falls	7	North central	(b)
Logan Lagoon	2 256	Flinders Island	Coastal
Medeas Cove	81	North east	Estuarine, marsh
Mile Island	8	Furneaux	Bird island
Moulting Lagoon	512	East	Brackish lagoon
Night Island	10	Furneaux	Bird island
Oakleigh Creek	756	North central	Nothofagus forest
Oyster Rocks	10	Furneaux	Bird Islands
Port Arthur	12	Tasman Pen.	(e)
Port Cygnet	81	South	Foreshore
Reef Island	10	Furneaux	Bird island

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National Parks, State Reserves, etc. at 31 December 1982—continued

Name	Area (ha)	Location	Description
<i>Conservation Areas</i>			
Risdon Cove	70	Hobart	(e)
Rocky Cape	20	North west	(a)
South Esk River	142	North Midlands	River, scenic
Tamar River	4 600	North	Estuarine, waterfall
Tathams Lagoon	13	King Island	Freshwater lagoon
Wright and Egg Islands	10	Bass Strait	Bird islands
Wybalenna Island	3	Furneaux	Bird island
<i>Muttonbird Reserves</i>			
Babel Island	445	Furneaux	Muttonbird hunting ground
Big Green Island	18	Furneaux	Muttonbird hunting ground
East Kangaroo Island	142	Furneaux	Muttonbird hunting ground
Great Dog Island	377	Furneaux	Muttonbird hunting ground
Hunter Island	7 365	North west	Muttonbird hunting ground
Little Green Island	89	Furneaux	Muttonbird hunting ground
Outer and Inner Sister Islands	1 012	Furneaux	Muttonbird hunting ground
<i>Wildlife Sanctuaries Under Joint Management With Other Authorities</i>			
Badger Corner	333	Flinders Island	Foreshore and marine
Beaufront	157	Midlands	Deer, Forester kangaroo
Ben Lomond	2 665	North east	Wet sclerophyll forest
Burnie Fernglade	44	North west	Fern gully
Cape Contrariety	4	South east	Muttonbird rookery
Cape Direction	5	South east	Muttonbird rookery
Cape Portland	663	North east	Waterfowl habitat
Carr Villa	62	Launceston	Modified sclerophyll forest
Chauncy Vale	357	East central	Dry sclerophyll forest
Deal Island	1 623	Bass Strait	Island, grassland
Deloraine	2	North central	Riverine, waterfowl
Derwent River	1 568	South east	Estuarine, river, marsh
Four Mile Creek	607	North	Estuarine, flats
Fulton Park	34	North	Scout camp
Glenorchy Water Reserve	712	Hobart, west	Dry sclerophyll forest
Goose Island	97	Furneaux	Bird island
Grimes Lagoon	173	Midlands	Freshwater lagoon, birds
Goulds Lagoon	8	Hobart, north	Brackish lagoon, birds
Henry Somerset Orchid	39	North	Orchid flora
Kingston Golf Course	61	Kingston	Dry sclerophyll forest
Lake Dulverton	217	Oatlands	Freshwater lagoon, birds
Launceston Golf Course	61	Launceston	Dry sclerophyll forest
Mount Pleasant	66	Launceston	Dry sclerophyll forest
Paterson Island	16	North central	Modified sclerophyll forest
Patriarchs	101	Flinders	Cape Barren geese
Pipers River	162	North east	Riverine
Punchbowl	24	Launceston	Modified sclerophyll forest
Reekara	2 428	King Island	Heathland tea tree
Sandspit River	550	East coast	Estuarine, marsh, birds
Scottsdale, N.E. Park	16	North east	Modified wet sclerophyll forest
Sea Elephant River	1 186	King Island	Coastal dunes, heath
Southport Lagoon	3 556	South east	Coastal lagoon
Southwest	777 151	South west	Scenic wilderness
St Clair Lagoon	255	South central	Lagoon
The Lea	150	South	Scout camp
Tooms Lake	22 663	East central	Lake, dry sclerophyll forest
Wayatmah Lagoon	1 809	South central	Storage reservoir
Woodstock Lagoon	20	North	Waterfowl habitat

(a) To be added to a National Park.

(d) To be added to a Nature Reserve

(b) To be added to a State Reserve.

(e) To be added to an Historic Site

(c) To be proclaimed an Historic Site.

Note: Sclerophyll forest. The term *sclerophyll* means 'hard leaved'. Most Australian forests are dominated by trees (usually eucalypts) and shrubs which have thick, hard leaves—an adaption to the dry Australian environment.

CLIMATE OF TASMANIA

(The following section was prepared by the Bureau of Meteorology)

Introduction

Since Tasmania lies between 40° and $43\frac{1}{2}^{\circ}$ south of the Equator and is an island with no point more than 115 kilometres from the sea, its climate is classified as temperate maritime. On the coast the daily temperature range averages about 8° Celsius, rising to about 12° Celsius further inland, indicating a slight continental effect.

The combination of mountainous terrain in the western half of the state and prevailing westerly winds produce a marked west-east variation of climate, and especially of rainfall.

Summers are mild and characterised by greatly lengthened days. The sun reaches a maximum elevation of $70-73^{\circ}$ in mid-summer, giving 15 hours of daylight in the north and $15\frac{1}{2}$ hours in the south. In mid-winter, the sun's elevation does not exceed $20-23^{\circ}$, and the shortest day consists of $9\frac{1}{4}$ hours of daylight in the north, falling to slightly under nine hours in the south.

In winter, westerly winds reach their greatest strength and persistence, causing a distinct maximum in rainfall distribution in the west and north-west. In the east and south-east, rainfall is more evenly distributed throughout the year. In comparison with those areas of Europe and North America which are at similar latitudes Tasmania enjoys a very temperate climate. This is due to the stabilizing effect of surrounding oceans whose temperatures change only $3-5^{\circ}$ throughout the year. The higher proportion of ocean to land area confers a similar benefit on the Southern Hemisphere as a whole.

Winds

The prevailing winds over most of the island are north-west to south-west, with greatest strength and persistence during late winter. Speed and direction vary with the eastward passage of high and low pressure systems. In the summer months, when westerlies are weak, afternoon sea-breezes become the predominant wind in coastal areas. Occasional periods of north-east to south-east winds occur.

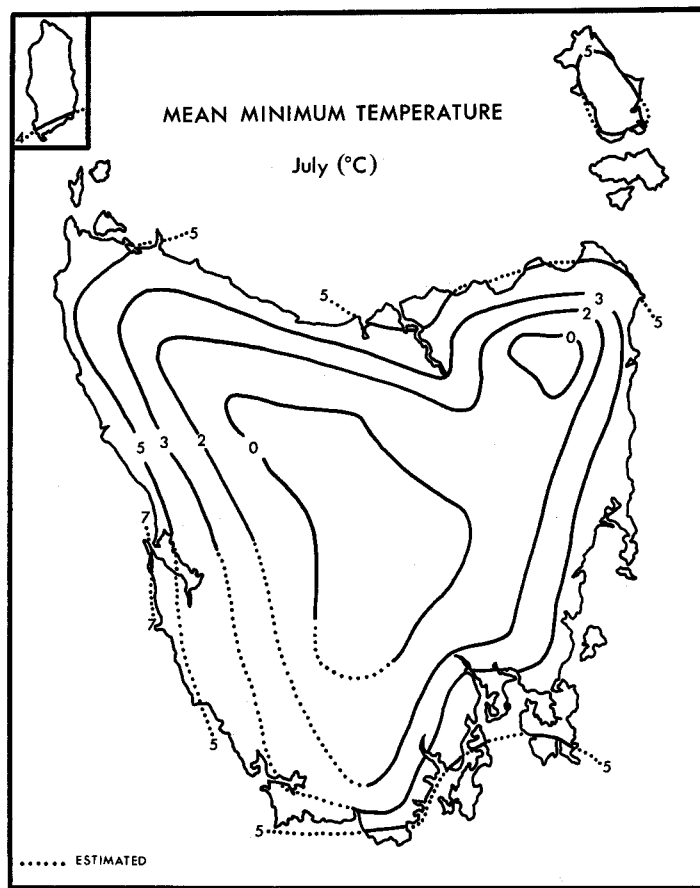
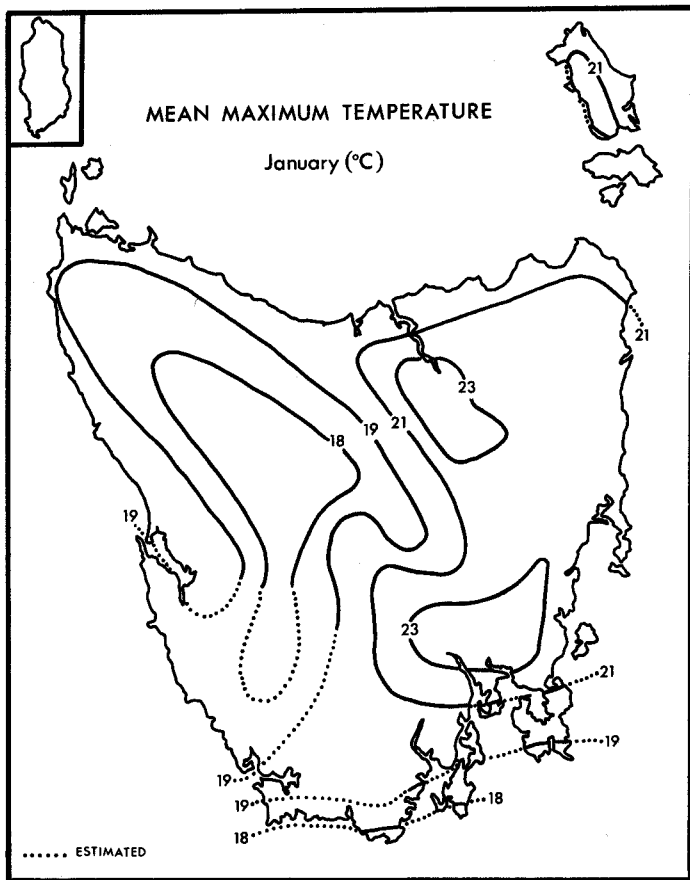
The highest average wind speeds are associated with extensive deep depressions over ocean areas south of Tasmania.

Temperature

Except under very stable conditions temperature decreases with height at the rate of about 1°C per 100 metres. Hence, in a mountainous island like Tasmania the isotherms (lines of equal temperature drawn on a map) will be much influenced by topography. Greater cloud cover over the western half, a result of the persistent westerlies, further decreases day-time temperatures in the west, while the Föhn effect warms and dries the westerly airstreams as they descent to the Midlands, the east coast and south-east districts.

The incidence of frosts is affected markedly by topography, the valleys acting as natural channels for the drainage of cold air at night. Widespread severe frosts are experienced in winter on the Central Plateau and in upland valleys. Inland centres below 300 metres are virtually frost-free only in summer, while the north coast, the east and south-east have few frosts after early October. Above 300 metres there is no frost-free month.

Tasmania only occasionally experiences the extremes of temperature common to the other states. High temperatures recorded in the east and south-east of Tasmania generally occur on the last day of a warm spell during which a dry air mass of mainland origin is advected over the State from a direction between north and north-west. Some cooling in the lower air layers over the waters of Bass Strait prevents the northern coast from reaching the higher temperatures that are experienced in the south under these conditions.



The highest temperatures ever recorded in Tasmania are 40.8°C at Bushy Park in December 1945 and at Hobart in January 1976. The lowest temperature recorded was - 12.8°C at Oatlands in May 1902.

The recorded extremes of temperature for Hobart are 40.8°C in January 1976 and - 2.8°C in June 1972 and July 1981. Readings above 38°C or below - 1°C are rare, the mean maximum temperature in summer being 21°C and the mean minimum in winter, 4.8°C.

The mean maximum temperature for January and the mean minimum temperature for July over Tasmania are shown in the two accompanying maps. The mean maximum is the average of daily maxima for January; the mean minimum the average of daily minima for July.

Rainfall

As Tasmania's position is on the northern edge of the 'Roaring Forties' (a westerly air-stream), its exposure to this stream and the mountainous nature of the terrain are the controlling influences on the amount, distribution and reliability of the State's rainfall.

In the west, average annual rainfall ranges from about 1 500 mm on the coast to 3 500 mm at Lake Margaret; in the north-east, from 500 mm on the coast to 1 300 mm on the highlands; while rainfall in the north-west ranges from 1000 mm near the coast to 1 600 mm in the higher inland areas.

Extreme three to five-day rainfalls occur most often on the west coast in late June when the westerlies are increasing in strength and persistence and the sea temperature is well above the land temperature. In the north, short periods of extreme precipitation occur when wind flow is sustained for up to two days from the north-east, usually from late autumn to spring. The high moisture content of such streams from over the relatively warm waters of the Tasman Sea results in heavier, if less prolonged, rainfall than is produced in the westerly streams.

There is a strong gradation in rainfall from west to east, because of topography, with a distinct rain shadow east of the Central Plateau. Parts of the Midlands average less than 500 mm per year. Totals in the east and south-east are higher (over 800 mm on exposed slopes).

Rainfall is least reliable in the east, south-east, Midlands and Derwent Valley. Highest rainfall in these areas tends to occur in autumn and spring, under the influence of small cyclonic depressions off the east coast.

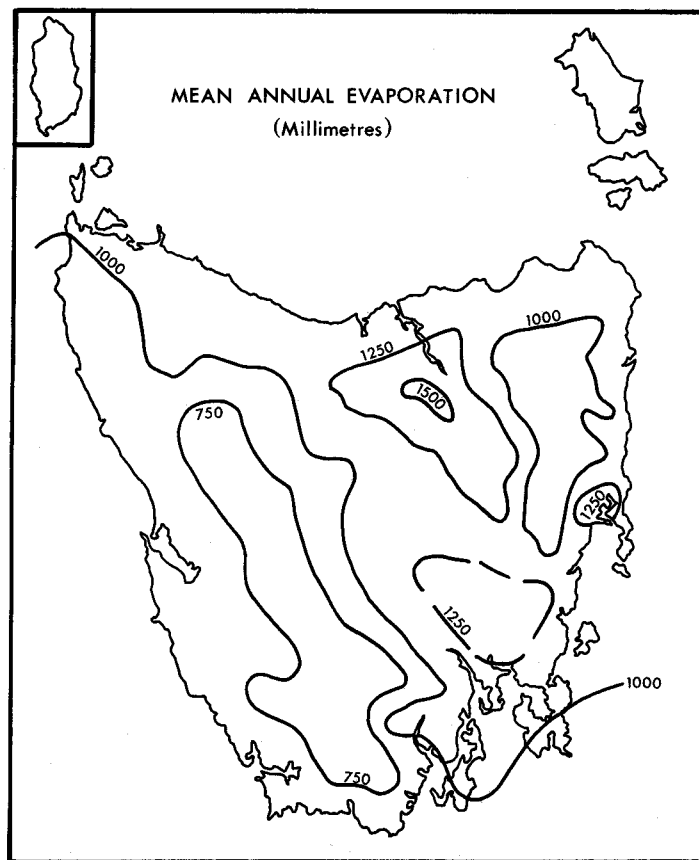
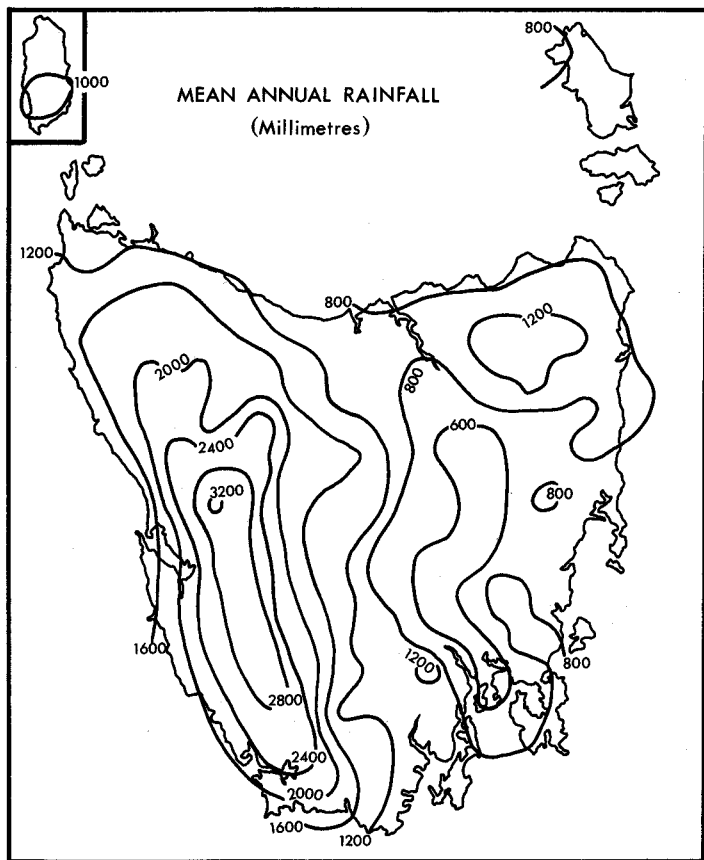
Effective rainfall is the amount necessary to compensate for evaporation, begin germination and maintain plant growth above wilting point. Average rainfall is sufficient for this purpose from May to September. From October to January the chance of receiving effective rainfall decreases, except in the west and north-west, where the probability is usually better than 50 per cent. In the Midlands, the Derwent Valley, the south-east and east, and in the northern inland, the chance of receiving at least effective rainfall during the summer months is very small.

The average annual rainfall distribution over Tasmania is shown on an accompanying map.

Snow and Hail

Snow and hail can be experienced over the highlands at any time of the year. Heaviest snowfalls occur, as a rule, in late winter and spring, and less frequently in June and July. Extensive snow below 150 metres occurs, on the average, less than once every two years, associated with an unusually vigorous outbreak of cold air from Antarctic regions. There is no permanent snowline, but patches of snow often remain on the highest peaks until December.

Hail is most likely in spring, though possible in any month. Hail storms are a big risk to fruit crops in the Huon Valley and on the Tasman Peninsula, and sometimes cause extensive damage.



Thunderstorms

These are most common in the west and about the north coast and are usually associated with the lifting of warm moist air by a cold front. Thunderstorms occur mainly in the summer months. Hobart and Launceston average five to seven storms per year, and the north and north-west, 10 to 15. The Central Plateau and north-eastern highlands report, on average, about five storms per year, while the Midlands, as gauged by Oatlands, has less than three.

Floods

In Tasmania the river system most affected by flooding is the South Esk. The Esk catchment includes most of the north-eastern highlands, where annual rainfall averages about 1 300 mm, and part of the Western Tiers where run-off can be rapid. As many rivers in the South Esk system flow through flat country, flooding can be widespread and disruptive.

Flooding of the Derwent River system can be extensive but is less frequent than in the South Esk. The most severe flood on record in the Derwent occurred in April 1960 with the peak discharge flow recorded as 3 400 cumecs (cubic metres per second) at Macquarie Plains. However, it is most unlikely that flooding of this severity will again occur on the Derwent due to the completion of four dams across the River since 1960 by the Hydro-Electric Commission.

Flooding of rivers in the west and south of the State can be of greater frequency than in the Derwent and Esk systems but because of mountainous terrain and lack of population these pass mostly unnoticed. Similarly, the short, fast-flowing rivers of the east coast flood and fall rapidly, but can cause damage and disruption of road systems.

On two occasions in 1974 torrential rain caused severe flooding in the north-east of Tasmania. There was widespread damage to property, serious damage to road systems and high stock losses in the floods which occurred less than two months apart.

In the north and north-west of Tasmania many rivers have their catchments along the northern edge of the Central Plateau and can flood quickly.

Humidity

The mean relative humidity at both 9.00 a.m. and 3.00 p.m. exceeds 50 per cent at all stations in all months of the year. Relative humidity is generally higher in the morning than in the afternoon, and higher in coastal regions than inland. Days of high temperature combined with uncomfortably high humidity are rare. In the east, south-east, and Fingal Valley, warm dry winds from a west or north-west direction may occasionally have a relative humidity as low as 10 per cent.

Droughts and Bushfires

Although Tasmania has the highest average rainfall of any state in Australia, drought conditions are not unknown. Unlike the remainder of Australia, droughts in this State tend to be highly localised and of reasonably short duration. The most severe effects are usually felt over a period of only a few months, but serious rainfall deficiencies can extend over a period of two or three years. The most severe long term droughts occurred during the periods 1888-1889, 1897-1898, 1918-1920, 1933-1934, 1945-1946, 1949-1952, 1967-1969, 1972-1973 and 1979-1982.

Serious bushfires occurred in 1898, 1915, 1946, 1951, 1967 and 1981. The bushfires of 7 February 1967 were the most severe in the State's history causing 62 deaths and damage to property estimated to be in excess of \$25m. The worst fires on the West Coast occurred during February 1981 with property damage around Zeehan estimated to be near \$5m.

Evaporation

Evaporation depends mainly on wind strength, the moisture deficit of the airstream and on sunshine. The World Meteorological Organisation has asked for standardisation

of measurement of evaporation by use of the Class 'A' pan (a galvanised pan, 1.22 metres in diameter and 25.4 centimetres deep) which gives higher figures for evaporation than those obtained from the containers previously used in Australia (Class 'A' pan figures should be multiplied by a factor of about 0.80 to obtain the average potential evapotranspiration likely for Tasmanian crops). The last map gives details for mean annual evaporation.

At Launceston Airport the annual evaporation is just under 1 500 mm due largely to the prevalence of winds coming from the Western Tiers, which become warmer and drier in their descent to the lower Midlands and Tamar areas, thus increasing evaporation. Monthly evaporation at Launceston Airport has ranged as high as 270 mm in summer but drops to between 25 and 40 mm in winter. This area of high evaporation extends southward to the lower Derwent and Huon areas. The lowest evaporation rate occurs in the Central Plateau, West Coast Ranges and south-west areas where annual evaporation may fall to less than 750 mm. This is due to the high moisture content of the prevailing westerlies and the high average cloud cover. In these areas the monthly evaporation rate may range from about 125 mm in January to only 12 mm in June and July.

Another area of lower evaporation (below 1 000 mm a year) is located in the North-East Highlands.

Sunshine

The average number of hours of sunshine a year ranges from about 2 500 hours in the northern Midlands to less than 1 750 hours on the west coast and western highlands, this area having the least amount of sunshine in Australia. Hobart averages 2 100 hours per year and Launceston around 2 400.

In January, daily averages of sunshine range from nine hours per day between the Midlands and Launceston to six hours per day on the west and south coasts. In mid-winter, average daily sunshine is down to a maximum of three hours on the east coast and to considerably less on the west coast and highlands.

The Climate of Hobart

Temperatures: Mean maximum temperature exceed 21°C in January and February. On average there are two or three days per year with maximum temperatures greater than 32°C. Only once, in February 1968, have three successive days over 32°C been recorded in Hobart. Minimum temperatures below -1°C are rare.

Rainfall: There is a strong gradient of rainfall to the immediate west of Hobart caused by the bulk of Mt Wellington. On the south-eastern slopes of the mountain the annual rainfall reaches 1 400 mm (at The Springs and The Gap) while at Fern Tree the annual average is 1 140 mm. The rainfall decreases to about 600 mm in the city area, the annual average being 631 mm at the Regional Office of the Bureau of Meteorology. Some eastern shore suburbs receive as little as 500mm of rain per annum.

Monthly totals are fairly uniform. The wettest 12 months on record at the Bureau's Hobart Office yielded 1 100 mm (to December 1916) and the driest, 320 mm (to November 1943).

Relative Humidity: Highest humidity is at the time of lowest temperature, in the early morning during winter. As temperatures rise to 3.00 p.m., humidity decreases by 15-20 per cent. The seasonal variation is not great, although the average humidity during the winter months is 70 to 75 per cent and during the summer months 58 per cent. Periods of high humidity combined with high temperatures are rare.

Fog: Fogs occur in the city about four times per year, in the cooler months, but are more frequent over and near the Derwent River, down which they are often carried on a light north-west wind. Fog frequency is far less than that for either Launceston or Melbourne.

Wind: The main wind direction is north-west, induced by the orientation of the Derwent Valley. Next in importance is the sea-breeze (from south or south-east) during summer months.

The strongest wind gust experienced in Hobart was 150 km/h recorded during a storm in September 1965.

Snow and Hail: Snow below 300 metres occurs, on the average, less than once per year. Falls lying in the centre of the city, almost at sea level, have occasionally been recorded, the last being in September 1970. Snow generally lies on Mt Wellington during winter and early spring months, but it is rare between November and March. Hail occurs about four times a year, mainly between September and November.

Frost: The average annual frequency of days of frost is 29, mostly from June to August. None has been recorded in January. Cold air drainage is found in the hilly suburbs and frosts are common on the valley floors.

Sunshine and Cloud: No marked seasonal variation of cloud amount occurs but a strong dependence on time of day is evident. During April to September cloud cover is greater in the afternoon and from October to March it is greater in the morning.

A clear-cut seasonal variation in monthly average hours of sunshine also occurs with amounts varying from 231 hours in January to 111 hours in June.

Climatic Data: The next table gives the main climatic data for Hobart and a comparison between the 1981 and long-term average rainfall conditions.

Hobart Climatic Data							
Month	Shade temperature				Mean daily hours of sunshine (a)	Rainfall	
	Mean maxima (a)	Mean minima (a)	Extremes (b)			1981	Long- term average (a)
			Maximum	Minimum			
°C	°C	°C	°C	hours	mm	mm	
January	21.4	11.7	40.8	4.5	7.9	18.2	48
February	21.5	11.9	40.2	3.4	7.1	11.8	41
March	20.0	10.7	37.3	1.8	6.3	57.4	47
April	17.1	8.9	30.6	0.7	5.1	72.2	54
May	14.2	6.8	25.4	−1.6	4.2	36.6	49
June	11.7	5.2	20.7	−2.8	3.9	73.6	58
July	11.4	4.5	21.0	−2.4	4.3	48.0	53
August	12.8	5.0	24.5	−1.8	5.0	105.8	52
September	14.9	6.3	28.2	−0.6	5.8	35.2	52
October	16.7	7.7	33.3	0.0	6.2	48.2	63
November	18.4	9.1	36.8	1.7	6.9	21.0	56
December	20.1	10.7	40.7	3.3	7.3	28.0	56
Total for year	..	..	..	..	..	548.0	629

(a) Long-term average.

(b) Specific extreme temperatures since records kept.

The next table compares Hobart climatic data with that of other Australian cities:

Capital Cities Climatic Data								
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra
Temperature (°C)—								
Mean daily max. .	21.4	19.9	25.4	22.4	23.2	16.7	32.3	19.3
Mean daily min. .	13.6	9.9	15.5	11.8	13.1	8.1	23.2	6.2
Extreme max.	45.3	45.6	43.2	47.6	44.7	40.8	40.5	42.2
Extreme min.	2.1	-2.8	2.3	0.0	1.2	-2.8	10.4	-10.0
Mean daily hours of sunshine	6.7	5.7	7.5	6.9	7.9	5.9	8.5	7.2
Rainfall—								
Mean annual (mm)	1 215	661	1 157	531	879	633	1 536	639
Mean annual days of rain	148	143	123	120	120	162	97	110
Wind—								
Average (km/h) ..	11.6	12.3	10.8	12.5	15.6	11.5	9.2	5.8

The Climate of Launceston

Being over 50 km from the coast, Launceston exhibits a slight continental effect — greater seasonal and daily variation of temperature and lower rainfall as compared with stations on the coast.

Temperature: Average maximum temperature exceeds 24°C in January and February, 21°C in December and March, and 13°C in June and July. Average minimum is about 11°C in summer, falling below 4°C in winter. Freezing temperatures are common during winter mornings, the lowest recorded being -6°C. Up to 50 frost days are to be expected in a year, mostly from May to August. Light frosts may occur in summer.

Rainfall: The annual average is 720 mm. The wettest month is July (85 mm) while February and March, the driest months, each receive less than half this amount. The wettest month on record is August 1936 (254 mm). Annual totals range from 467 mm (1908) to 1 057 mm (1946). Some severe thunderstorms are experienced. Snow does not settle in Launceston, but falls occur on surrounding hills.

Relative Humidity: Seasonal and daily variations are similar to those for Hobart but the daily readings are 5 to 10 per cent higher.

Fog: Occasions of high humidity, associated with moist north-east airstreams, are relatively frequent. Fog occurrence averages more than 30 days a year, mostly between May and August.

Winds: The NW-SE orientation of the Tamar Valley has a marked effect on surface winds, which conform mainly to these directions. The north-west wind is often reinforced in the afternoon by a sea-breeze from much the same direction. Strong winds are most common during the colder half of the year and severe squalls can occur in association with thunderstorms.

Rainfall Statistics

Meteorological Districts

Tasmania is divided into nine meteorological districts (not to be confused with statistical divisions) with fairly well-defined land use patterns appropriate to each. The following table shows rainfall totals of each district for recent years.

**Rainfall of Tasmania in Districts
(Millimetres)**

<i>Period</i>	<i>Northern Crops, dairying, forestry</i>	<i>King Island Grazing, dairying</i>	<i>Central Plateau Grazing (mainly sheep)</i>	<i>Midlands</i>
1975	1 318	1 265	1 299	715
1976	839	1 095	905	519
1977	903	994	989	511
1978	926	875	1 002	557
1979	1 045	1 048	973	427
1980	944	772	989	412
1981	943	700	1 132	555
District average (a)	1 004	945	992	553

<i>Period</i>	<i>Derwent Valley</i>	<i>South East</i>	<i>East Coast</i>	<i>West Coast</i>	<i>Flinders Island</i>
	<i>Fruit growing, grazing, forestry</i>		<i>Grazing, mining, forestry</i>	<i>Mining</i>	<i>Grazing</i>
1975	931	1 036	949	2 814	717
1976	618	888	831	2 306	699
1977	612	709	710	2 456	615
1978	684	752	880	2 194	823
1979	692	603	601	2 522	703
1980	760	719	658	2 565	658
1981	722	796	768	2 362	764
District average (a)	684	755	821	2 341	741

(a) Long-term annual average based on 69 years of record.

Rainfall at Selected Stations and Rainfall Index by Districts

The table below shows the annual rainfall for selected stations over the last five years.

**Annual Rainfall at Representative Stations
(Millimetres)**

<i>Station</i>	<i>1976</i>	<i>1977</i>	<i>1978</i>	<i>1979</i>	<i>1980</i>	<i>1981</i>	<i>Long-term average (a)</i>
Avoca	571	527	668	453	474	562	562
Beaconsfield	833	869	951	1 003	960	927	959
Burnie (APPM)	866	866	1 067	1 143	963	980	1 020
Campbell Town	494	528	582	443	397	547	551
Cressy Research	485	647	653	553	546	597	647
Deloraine (Goderick) ...	873	917	872	995	896	793	998
Franklin	913	702	827	683	914	874	901
Hobart (Weather Bureau)	663	495	608	390	464	548	629
Hobart (Airport)	622	484	511	353	385	483	552
Kettering	1 058	798	809	n.a.	n.a.	856	886
Launceston (Airport) ...	520	632	687	616	600	652	715
Lilydale	960	930	857	930	1 015	1 044	982
Lymington	n.a.	711	768	661	713	767	792
Maydena	1 106	1 219	1 107	1 173	1 401	1 313	1 241
New Norfolk	516	396	n.a.	n.a.	453	559	553
Oatlands	543	463	529	443	434	572	565
Queenstown	2 486	2 576	2 515	2 645	2 800	2 422	2 535
Ringarooma	1 148	1 086	1 250	1 226	1 175	1 206	1 238
Savage River	1 974	n.a.	1 693	2 108	2 001	1 824	2 009
Smithton	1 045	1 118	1 109	1 342	1 094	1 124	1 115
St Helens	856	706	968	531	635	675	781
St Marys	1 150	872	1 193	816	838	1 038	1 032
Swansea	592	468	715	333	456	598	613
Triabunna	724	553	710	376	478	613	661
Ulverstone	771	872	954	1 033	911	923	969

(a) Number of years of record used to calculate the long-term average varies from station to station.

The next table gives details of a rainfall index for meteorological districts for recent years. The index shows the actual rainfall for a district expressed as a percentage of 'normal' rainfall (where 'normal' rainfall or the 'distinct average' is the mean for the 69-year period 1913-1981, i.e. the long-term average based on 69 years of record—details relating to annual rainfall and annual district average 'normal' rainfall are shown in an earlier table).

Rainfall Index by Districts, Tasmania
(Index showing actual rainfall expressed as a percentage of 'normal' (a) rainfall)

Period	Meteorological district							
	Northern	King Island	Central Plateau	Midlands	Derwent Valley	South-east	East Coast	West Coast
1975	131	133	131	128	136	136	114	121
1976	83	115	92	94	78	123	100	102
1977	90	105	100	92	90	93	86	105
1978	92	92	101	100	100	99	106	94
1979	104	110	99	77	102	80	73	108
1980	94	81	115	75	111	95	80	110
1981	94	74	114	100	106	105	94	101

(a) 'Normal' rainfall is the mean for the 69-year period 1913-1981.

Seasonal Temperatures

Temperatures at Selected Stations, Tasmania, 1981
(°C)

Station	Maximum temperatures		Minimum temperatures		Mean temperatures	
	Mean for 1981 season (a)	Departure from normal (b)	Mean for 1981 season (c)	Departure from normal (b)	Mean for 1981 season	Departure from normal (b)
<i>Summer (December to February)</i>						
Hobart	22.4	+1.4	13.0	+1.7	17.7	+1.5
Launceston						
Airport	24.5	+2.2	11.8	+2.2	18.1	+2.2
Cape Bruny	19.7	+2.0	12.5	+1.6	16.1	+1.8
Devonport	21.7	+0.6	13.1	+1.6	17.4	+1.1
New Norfolk ..	23.8	+1.0	11.2	+0.6	17.5	+0.8
Oatlands	22.6	+1.5	9.6	+1.8	16.1	+1.6
Saint Helens ...	22.8	+0.9	13.1	+2.2	17.9	+1.5
Savage River ..	20.8	+1.9	10.5	+1.2	15.6	+1.5
Queenstown	23.7	+2.8	9.4	+1.3	16.5	+2.0
<i>Autumn (March to May)</i>						
Hobart	17.9	+0.8	9.8	+1.1	13.8	+0.9
Launceston						
Airport	17.9	+0.7	7.1	+0.4	12.5	+0.5
Cape Bruny	16.3	+1.1	10.8	+1.4	13.5	+1.2
Devonport	17.7	+0.1	9.7	+0.8	13.7	+0.4
New Norfolk ..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Oatlands	16.6	+0.8	5.3	+0.3	10.9	+0.5
St Helens	19.4	+1.0	8.9	+1.3	14.1	+1.1
Savage River ..	14.3	-0.2	8.0	+0.9	11.1	+0.3
Queenstown	17.0	+0.1	6.7	+0.7	11.8	+0.4

continued next page

Temperatures at Selected Stations, Tasmania, 1981
(°C)—*continued*

Station	Maximum temperatures		Minimum temperatures		Mean temperatures	
	Mean for 1981 season (a)	Departure from normal (b)	Mean for 1981 season (c)	Departure from normal (b)	Mean for 1981 season	Departure from normal (b)
<i>Winter (June to August)</i>						
Hobart	12.3	+0.3	5.3	+0.5	8.8	+0.4
Launceston						
Airport	11.1	-0.2	3.0	+0.3	7.0	0.0
Cape Bruny	11.4	+0.1	6.7	+0.5	9.0	+0.3
Devenport	12.5	-0.2	4.7	+0.3	8.6	0.0
New Norfolk ..	10.9	-0.5	2.3	-0.1	6.6	-0.2
Oatlands	9.3	-1.0	n.a.	n.a.	n.a.	n.a.
St Helens	13.8	+0.2	4.1	+0.9	8.9	+0.5
Savage River ..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Queenstown	16.5	+0.2	2.8	+0.4	7.5	+0.3
<i>Spring (September to November)</i>						
Hobart	18.0	+1.3	9.1	+1.5	13.5	+1.4
Launceston						
Airport	16.8	+0.5	5.9	+0.4	11.3	+0.4
Cape Bruny	15.3	+0.5	8.9	+1.2	12.1	+0.8
Devenport	16.0	-0.5	8.1	+0.9	12.0	+0.2
New Norfolk ..	17.9	+1.0	6.3	0.0	12.1	+0.5
Oatlands	16.1	+0.7	5.3	+1.0	10.7	+0.8
St Helens	18.9	+1.4	7.9	+1.3	13.4	+1.3
Savage River ..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Queenstown	16.5	+0.9	6.3	+1.3	11.4	+1.1

(a) Average of maximum daily temperatures for season.

(b) 'Normal' is the mean for the season averaged for the available years of record.

(c) Average of minimum daily temperatures for season.

The mean temperature for any locality can give a false impression, e.g. a mean temperature of 25°C based on a maximum of 50°C and a minimum of 0°C, all in the one day. A better way of examining a locality's climate is to take the maximum temperature each day and average these readings for each season; similarly, to take the minimum temperature each day and average these readings for each season. These mean maxima and mean minima then give an indication of the daily variation that may be expected. The above table shows the mean maximum and mean minimum temperatures for nine selected stations in summer, autumn, winter and spring.

Monthly Weather Review — 1982

January

January provided Tasmania with well above normal day-time and night-time temperatures causing statistical averages to be as much as 1.5-2°C higher than the long term normals. Rainfall during January was well below normal in almost all regions, particularly on King and Flinders Islands.

February

February continued the January trend of above normal day-time temperatures, but the night-time minimum temperatures were close to normal. Major bushfires occurred in the middle of the month. Rainfall deficiencies occurred in all districts, ranging from 31% below normal in the southeast to 84% below on Flinders Island.

March

The most significant feature of Tasmania's weather during March was an increase in rainfall in most districts but there were still isolated pockets of rain deficiency on the Central East Coast, South Esk Valley and Huon Valley. March maximum temperatures were above normal in most districts, particularly in the north of the State. Minimum temperatures were mainly within one degree of normal.

April

Most of April was relatively dry with mild temperatures. It was only during the final week that significant rainfall occurred; temperatures fell considerably, and some severe weather was experienced.

May

Average monthly temperatures for May were slightly above normal in most areas, particularly the average minima. Rainfall was varied across the State with monthly falls well above average in the west and well below in the east. Some unusually heavy snowfalls occurred around 21 May.

June

During June the maximum and minimum temperatures were colder than normal. Frosts and fogs were more prevalent, especially during the last week. Rainfall was below normal especially on the Central Plateau and the Derwent Valley.

July

July was a cold, dry month with both maximum and minimum temperatures below normal in almost all areas. Only a few isolated pockets received above average rainfall. A cold front moving north across the State brought extreme conditions to many districts in the middle of the month.

August

Rainfall was extremely low with many stations recording their lowest ever August totals. Many areas were experiencing drought conditions. Temperatures were well above normal, particularly maximum temperatures. Several stations reported new August record temperatures.

September

During September, rainfall was above average except for the north and east. Mean temperatures for the month were a little below average throughout the State.

October

Rainfall during October was very low. All districts recorded below average rainfall except on the West Coast. Drought conditions continued in many areas as serious rainfall deficiencies continued. Maximum and minimum temperatures were around normal.

November

Severe weather conditions were experienced in the State, particularly in the eastern half, during November. Gale to stormforce winds caused considerable damage across the State. Frequent gusts of up to 110 kmh were reported. The severe lack of rainfall perpetuated the drought conditions experienced over much of the State. Maximum temperatures were well above normal for November whilst minimum temperatures were around normal. These conditions saw numerous and significant bushfires throughout the State.

December

December temperatures were within one degree of average. Significant and heavy rainfall totals were received in the northeast between 7 and 9 December. These heavy rainfalls were reflected in flooding of the Break O'Day, St Pauls, South Esk, Macquarie and Elizabeth Rivers.

ENVIRONMENTAL CONTROL

Department of the Environment

Established in October 1972, the Department of the Environment is headed by a Director of Environmental Control who is responsible to the Minister for the Environment. Staff include a number of scientific experts who are responsible for particular aspects of pollution control and investigations—chemists, noise control investigators, air and water pollution officers and a waste management officer.

The *Environment Protection Act 1973* gives the Director the general duties of: (i) protecting the State's environment; (ii) ensuring the control or prevention of any act or emission which causes or may lead to pollution; and (iii) co-ordinating all necessary activities (government or private) to protect, restore or improve Tasmania's environment. In addition to the general duties the Act also confers the following more specific functions on the Director: (i) consider means and initiate steps for the protection of the environment and for the prevention, control, abatement or mitigation of pollution; (ii) carry out investigations into environmental protection problems; (iii) obtain advice from experts in the field of environmental protection; (iv) review progress made in attaining objectives of the Act and publicise steps taken to protect the environment; (v) advise on pollution standards and methods of sampling and testing for pollutants; and (vi) promote and co-ordinate planning projects for environmental protection.

Coverage of the Act: In the case of inconsistencies the *Environment Protection Act 1973* prevails over the provisions of all other Acts with two exceptions: (i) *Oil Pollution Act 1961*; and (ii) *Public Health Act 1962*. Since provisions of the *Environment Protection Act* would intrude into various sectors of existing legislation, the *Statute Law Revision (Environment Protection) Act 1973* was introduced concurrently. The effect of this statute was to amend the Criminal Code, the *Local Government Act 1962*, the *Mining Act 1929*, the *River Pollution Act 1881*, the *Hydro-Electric Commission Act 1944* and the *Water Act 1957* to conform with the *Environment Protection Act 1973*.

Staff of the Department of the Environment continually visit most areas of Tasmania either monitoring or investigating complaints and pollution problems. Departmental officers have attended interstate seminars and conferences and visited other environment protection authorities for exchange of information. The Department participates in the work of the Australian Environment Council and has staff on a number of the Council's committees. In addition the Department is represented on the committee of the Keep Australia Beautiful Council. The Department is also represented on State Government inter-departmental committees which deal with environmental matters. Environmental seminars and lectures have been organised by the Department and special papers written dealing with the environment.

Oil Pollution Control: In 1978 an appointment was made to the position of State Oil Pollution Control Officer within the Department. The Tasmanian supplement to the National Plan to combat the pollution of the sea by oil has been up-dated and published. A State Oil Pollution Committee has also been formed to function under the National Plan with the following functions: (i) to be a source of information and advice to the Government through the Marine Pollution Committee on matters of oil pollution; and (ii) to operate in combating any actual incident.

Environment Protection Advisory Council

The 1973 legislation also provided for the creation of the Environment Protection Advisory Council. Under the chairmanship of the Director of Environmental Control the Council has members drawn from government and private sectors and representing a number of diverse interests; e.g. the mining, secondary, rural and forestry industries, conservation groups, the Hydro-Electric Commission, trade unions, public health, etc. The council's task is to advise the Minister and make recommendations to the Government on environmental matters. The Council is empowered to appoint committees to investigate specific subjects. Committees appointed are—Noise Committee, Waste Committee, Air

Committee and the Water Committee. As a result, regulations covering all the above pollution subjects have been promulgated.

An Intensive Animal Husbandry Committee was set up in August 1975 to deal with pollution problems posed by this industry. Guidelines have now been issued to operators and local government authorities setting out design and operation procedures to control pollution problems in the industry.

Environmental Impact Studies

The State Government has adopted a policy that requires public authorities to undertake environmental impact studies before proceeding with any development which may have a significant effect upon the State's environment. Responsibility for ensuring that such studies are performed rests with the decision-making authority. Co-ordination and evaluation of environmental impact studies are performed by the Director of Environmental Control.

Scope of an environmental impact study includes:

- (i) A statement of the major objective of the proposed project.
- (ii) An analysis of the technological likelihood of achieving the objective.
- (iii) A statement of alternative practical plans for achieving the objective.
- (iv) An outline of existing characteristics of the environment prior to implementation of the development project.
- (v) Separate reports on alternative practical engineering plans for achieving the goal.
- (iv) An assessment of the probable effect of the project upon the environment.

Such a study is to be used by the proposing body in determining environmental safeguards. For the Director of Environmental Control a study will provide a basis for review of the safeguards and for making recommendations for further protective measures.

Further References

DAVIES, J. L. (ed.) *Atlas of Tasmania* (Land and Survey Department, Hobart, 1965).
Monthly Weather Review, Tasmania (published monthly by the Bureau of Meteorology, Hobart)



Victoria Dock, Hobart
Franklin Square, Hobart

(Tasmanian Government Stills Photographic Section)





Tamar River, Launceston
Princes Square, Launceston

(Tasmanian Government Stills Photographic Section)



CHAPTER 3

GOVERNMENT AND ADMINISTRATION

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Chapter 3

GOVERNMENT AND ADMINISTRATION

Introduction

Government in Tasmania is exercised at three levels:

- (i) The Federal Government, with authority based on a written constitution, and centred in Canberra.
- (ii) The State, with residual powers, and centred in Hobart.
- (iii) The cities and municipalities, with authority derived from State acts, and operating in 49 sub-divisions of the State.

This chapter deals primarily with the State Government and with Tasmanian representation in the Federal Parliament. The administration of the cities and municipalities is described in Chapter 5, 'Local Government'. A more detailed outline of the Tasmanian system of government is included in the 1976 and earlier editions of the *Year Book*.

TASMANIAN REPRESENTATION IN FEDERAL PARLIAMENT

The Federal Parliament consists of the Queen, a Senate and a House of Representatives. The Queen is represented in Australia by the Governor-General.

The House of Representatives

Representation in the House of Representatives is based upon the general principle of having, as nearly as practicable, electorates with equal numbers of electors. This is only possible if regular electoral redistributions are implemented. The following table indicates the state of the House of Representatives at the elections immediately following electoral redistribution and/or passage of legislation creating additional electorates:

Membership: House of Representatives

Year	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T. (a)	A.C.T. (b)	Total
1948	28	20	10	6	5	5	1	—	75
1949 (c) ..	47	33	18	10	8	5	1	1	123
1955 (c) ..	46	33	18	11	9	5	1	1	124
1969 (c) ..	45	34	18	12	9	5	1	1	125
1974	45	34	18	12	10	5	1	2	127
1977 (c) ..	43	33	19	11	10	5	1	2	124
1980	43	33	19	11	11	5	1	2	125

(a) Representative in House since 1922; full voting rights granted 1969.

(b) Representative in House since 1949; full voting rights granted 1966.

(c) Election following an electoral redistribution.

Elections for the House of Representatives

Australia is currently divided into 125 single-member electorates and electors are required to cast a vote for every candidate standing within the electorate in order of their preference. Election of members is carried out in accordance with the principles of the absolute majority through use of the alternative vote (see 'The Legislative Council—Preferential Voting' for a description of similar electoral principles). If a vacancy occurs in the House of Representatives, it is filled by holding a by-election in the electorate

concerned. Elections for the House of Representatives must be held at least every three years.

The Senate

In the Senate, each state is represented by ten senators and, in addition, the Australian Capital Territory and the Northern Territory have been represented by two senators each since the election of 13 December 1975. Each senator's term is normally six years, as half the senate seats come up for election every three years. In accordance with the *Senate Representation of Territories Act*, senators from the Northern Territory and A.C.T. are elected for the term of the House of Representatives. However, in the case of a double dissolution of both Houses, half the senators are elected for a six-year term (the first five elected in each state) and half for a three-year term.

In Senate elections each state is an electorate. Electors are required to cast a vote for every candidate standing within the state in order of their preference. Election of members is carried out in accordance with the principles of proportional representation by the single transferable vote (see 'Elections for the House of Assembly' later in this Chapter for a description of similar electoral principles).

If a vacancy occurs in the Senate, the appropriate state government nominates a replacement, of the same political affiliation, who sits until the next general election (either for the House of Representatives or for the Senate), when an election is held to fill the vacancy. If a senator fills such a vacancy through an election held at the same time as an election for the House of Representatives, his term will be the same as if the vacating member's term were to run its full course. If the vacant seat is contested at an ordinary Senate election, then six, instead of the normal five candidates, will be elected in the state affected and the senator last elected will fill the vacancy for a term shorter than the full six years.

Double Dissolution Election, 1983

Citing disagreement between the House of Representatives and the Senate on the proposed laws intituled—

Sales Tax Amendment Bill (No. 1A) 1981
Sales Tax Amendment Bill (No. 2A) 1981
Sales Tax Amendment Bill (No. 3A) 1981
Sales Tax Amendment Bill (No. 4A) 1981
Sales Tax Amendment Bill (No. 5A) 1981
Sales Tax Amendment Bill (No. 6A) 1981
Sales Tax Amendment Bill (No. 7A) 1981
Sales Tax Amendment Bill (No. 8A) 1981
Sales Tax Amendment Bill (No. 9A) 1981
Canberra College of Advanced Education Amendment Bill 1981
States Grants (Tertiary Education Assistance) Amendment Bill (No. 2) 1981
Australian National University Amendment Bill (No. 3) 1981
Social Services Amendment Bill (No. 3) 1981,

the Prime Minister, Mr Fraser, on 3 February 1983, formerly requested the Governor-General to simultaneously dissolve both houses of parliament. Writs for the double dissolution election were issued designating 19 February for the close of nominations and 5 March as polling day.

The following tables list the candidates and the results of the election in Tasmania:

Candidates

House of Representatives		
<i>Electorate</i>	<i>Candidates</i>	<i>Party</i>
Bass	Goldie, Nick Hutchison, Richard Leslie McDonald, John Newman, Kevin *	Australian Democrats Independent Labor Liberal
Braddon	Fee, Lance Groom, Ray * Sargent, Greg	Labor Liberal Australian Democrats
Denison	Hodgman, Michael * Smith, Kathy Wagner, Leica Wallace-Williams, Harvey	Liberal Labor Socialist Workers Party Australian Democrats
Franklin	Bladel, Fran Goodluck, Bruce * Mazengarb, David Thomson, John	Labor Liberal Socialist Workers Party Australian Democrats
Wilmot	Burr, Max * Chugg, Bill Holloway, Liz Llewellyn, David	Liberal Independent Australian Democrats Labor

Senate			
<i>Liberal</i>	<i>Australian Democrats</i>	<i>Labor</i>	<i>Independent</i>
Rae, Peter *	Sanders, Norm	Grimes, Don *	Harradine, Brian *
Walters, Shirley *	Creet, Peter	Tate, Michael *	Jones, John
Archer, Brian *	Duthoit, Margaret	Hearn, Jean *	
Townley, Michael *		Coates, John *	
Watson, John *		White, John	
Ibbott, Gordon		Buchanan, Vicki	

* Sitting members, all returned.

Results

House of Representatives						
	Electorate					Tasmania
	Bass	Braddon	Denison	Franklin	Wilmot	
Number of electors eligible to vote	56 953	54 136	55 741	58 309	56 929	282 068
Votes cast Number	54 622	52 000	53 496	54 074	54 808	271 000
Percent	95.91	96.05	95.97	95.17	96.27	96.10
Informal votes Number ..	1 409	1 110	1 199	1 047	1 467	6 232
Percent	2.58	2.13	2.24	1.87	2.68	2.30
Primary votes cast by political party						
Liberal	28 448	31 143	28 468	28 814	28 520	145 393
Australian Democrats ..	3 291	1 731	1 743	1 357	1 336	9 458
Labor	19 590	18 016	21 680	24 578	22 783	106 647
Socialist Workers						
Party	—	—	406	278	—	684
Independent	1 884	—	—	—	702	2 586
Total valid votes	53 213	50 890	52 297	55 027	53 341	264 768

Senate				
	<i>Liberal</i>	<i>Australian Democrats</i>	<i>Labor</i>	<i>Independent</i>
Primary vote				
Number	106 768	17 089	82 343	44 696
Percent	44.58	6.81	32.82	17.81
Quotas (22 809)	4.68	0.75	3.61	1.96
Informal votes				
Number	20 104			
Percent	7.41			
Total primary vote	250 896			
Total votes cast	271 000			

TASMANIAN GOVERNMENT

Division of Power

Under the *Commonwealth of Australia Act 1900*, the State of Tasmania surrendered part of its sovereignty and it was possible, at that point in time, to classify the totality of powers to be vested in the Federal Government and the State as follows:

- (i) Exclusive powers to be exercised by the Federal Government alone.
- (ii) Concurrent powers to be exercised both by the Federal Government and the State (subject to the supremacy of Federal Government law in cases of inconsistency).
- (iii) Residual powers to be exercised by the State.

Since Federation there have been considerable changes in functions actually performed by the two governments due to constitutional amendments and to inter-governmental agreements affecting function. It will suffice, therefore, to list the main fields of activity of the Federal Government today:

Foreign affairs and diplomatic representation; maintenance of the armed forces; customs and excise; posts and telegraphs; control of broadcasting and television; control of civil aviation; repatriation of ex-servicemen; immigration; industrial arbitration for national industries; control of coinage and currency; overseas trade promotion; employment service; age, invalid and widows' pensions; national health benefits; federal territories and overseas dependencies; census and statistics; meteorological service; federal courts and police; control of banking; collection of sales and income taxes; housing assistance and defence service homes; scientific and industrial research; management of state and national debt; lighthouses and navigation; Australian territorial sea and sea-bed. (The Constitution of the Commonwealth of Australia is reprinted in Chapter 1 of *Year Book, Australia, 1977-1978* (Cat. No. 1301.0).)

The departments, authorities, etc. of the Tasmanian Government are listed in a later section of this chapter headed 'The Present System of Government.'

The State Governor

Tasmania follows British tradition and accepts as its Queen, Elizabeth the Second. Her Majesty appoints the Governor who acts as head of state, generally for a five-year term. The relationship existing between the Queen and the British Parliament is broadly the same as that existing between the Governor and the Tasmanian Parliament. For details relating to the Governor's powers and functions, see the 1976 and earlier editions of the *Year Book*.

Until the succession of Sir Stanley Burbury, KBE on 5 December 1973, Tasmanian governors had come from the United Kingdom since the first settlement, although in some other states and the Commonwealth, Australians had been appointed to vice-regal offices. Sir Stanley was sworn in on 5 December 1973, succeeding Lt-General Sir Edric Bastyan, a former Governor of South Australia.

The next table shows the succession of governors from 1930. Administrators and lieutenant-governors (who act in place of the Governor in the event of his death, incapacity, removal or absence from the State) are only included where necessary, to maintain a continuous time series (i.e. short periods of relief during a governorship are excluded). A complete list from 1803 is included in the 1976 *Year Book*.

Succession of Governors, Acting Governors, Administrators, etc. from 1930

<i>Name</i>	<i>Designation</i>	<i>Period</i>
Sir James O'Grady, KCMG	Governor	23.12.24-23.12.30
Sir Herbert Nicholls, KCMG	Lieutenant-Governor	23.12.30- 4. 8.33
Sir Ernest Clark, KCMG, KCB, CBE	Governor	4. 8.33- 4. 8.45
Sir John Morris, KT	Administrator	4. 8.45-24.12.45
Admiral Sir Hugh Binney, KCB, KCMG, DSO	Governor	24.12.45- 8. 5.51
Sir John Morris, KCMG	Administrator	8. 5.51-22. 8.51
Rt Hon. Sir Ronald Cross, Bart, KCMG, KCVO	Governor	22. 8.51- 4. 6.58
Hon. Sir Stanley Burbury, KBE	Administrator	4. 6.58-21.10.59
Rt Hon. the Lord Rowallan, KT, KBE, MC	Governor	21.10.59-25. 3.63
Hon. Sir Stanley Burbury, KBE	Administrator	25. 3.63-24. 9.63
Lt-General Sir Charles Gairdner, KCMG, KCVO, KBE, CB	Governor	24. 9.63-11. 7.68
Hon. Sir Stanley Burbury, KBE	Administrator	11. 7.68- 2.12.68
Lt-General Sir Edric Bastyan, KCMG, KCVO, KBE, CB	Governor	2.12.68-30.11.73
Hon. Mr Justice Green	Administrator	30.11.73- 5.12.73
Hon. Sir Stanley Burbury, KCVO, KBE	Governor	5.12.73-30. 9.82
Hon. Sir Guy Green, KBE	Lieutenant-Governor	1. 4.82-30. 9.82
Sir James Plimsoll, AC, CBE	Governor	1.10.82-

The Cabinet and Executive Government

General

In Tasmania, as in the other States and the Federal Government, executive government is based on the system which was evolved in Britain in the 18th century, and which is generally known as 'Cabinet', or 'responsible' government. Its essence is that the head of the state (in Tasmania, the Governor representing Her Majesty the Queen) should perform governmental acts on the advice of his ministers; that he should choose his principal ministers of state from members of parliament belonging to the party, or coalition of parties, commanding a majority in the popular house; that the ministry so chosen should be collectively responsible to that house for the government of the country; and that the ministry should resign if it ceases to command a majority there.

The Cabinet system operates chiefly by means of constitutional conventions, customs or understandings, and through institutions that do not form part of the legal structure of the government at all. In law, the executive power of the State is exercised by the Governor who is advised by the Executive Council which he himself has appointed and which meets for certain formal purposes. The whole policy of a ministry is, in practice, determined by the ministers of the Crown, meeting without the Governor under the chairmanship of the Premier, and this body is known as the Cabinet.

The Appointment of Ministers

Legally, ministers hold office during the pleasure of the Governor. In practice, however, the discretion of the head of state in the choice of ministers is limited by the conventions on which the Cabinet system rests. When a ministry resigns, the Governor's custom is to send for the leader of the party which commands a majority in the lower house, and to commission him as Premier, to 'form a ministry'—that is, to nominate other persons to be appointed as ministers of the Crown and to serve as his colleagues in the Cabinet.

The *Constitution Act* 1854 defined the Parliament of Tasmania as 'the Governor and the Legislative Council and House of Assembly together'. Although no legal requirements enforce it, the selection of all ministers of the Crown from Parliament stems from the British tradition and sharply contrasts with the American system which requires its ministers not to be members of Congress.

At 1 February 1983 the ministry, led by the Hon. R. T. Gray, was:

Ministry at 1 February 1983

Name	House	Ministerial responsibilities (a)
The Hon. R. T. Gray	Assembly	Premier; Treasurer; Energy; Racing and Gaming.
The Hon. E. M. Bingham	Assembly	Deputy Premier; Attorney-General; Education; Industrial Relations.
The Hon. G. A. Pearsall	Assembly	Tourism; National Parks and Recreational Lands; Environment; Licensing; Housing.
The Hon. N. M. Robson	Assembly	Industry and Small Business; Inland Fisheries.
The Hon. T. J. Cleary	Assembly	Health; Community Welfare and the Elderly; Ethnic Affairs.
The Hon. I. M. Braid	Assembly	Construction; Main Roads; Local Government; Lands.
The Hon. R. J. Beswick	Assembly	Primary Industry; Forests; Sea Fisheries; Water Resources.
The Hon. F. R. Groom	Assembly	Mines; Transport; Administrative Services; Police and Emergency Services.

(a) See section 'The Present System of Government' later in the chapter for a more detailed statement of responsibility.

Premiers

The following table lists Premiers of Tasmania from 1930 (a complete list from 1856 is included in the 1976 *Year Book*):

Premiers from 1930

Name of Premier	Term of office		Duration of office (months)
	From	To	
J. C. McPhee	15.6.28	15.3.34	69
Sir Walter Lee	15.3.34	22.6.34	3
A. G. Ogilvie (a)	22.6.34	10.6.39	60
E. Dwyer Gray	11.6.39	18.12.39	6
R. Cosgrove	18.12.39	18.12.47	96
E. Brooker	18.12.47	25.2.48	2
R. Cosgrove	25.2.48	26.8.58	126
E. E. Reece	26.8.58	26.5.69	129
W. A. Bethune	26.5.69	3.5.72	35
E. E. Reece	3.5.72	31.3.75	35
W. A. Neilson	31.3.75	1.12.77	32
D. A. Lowe	1.12.77	11.11.81	47
H. N. Holgate	11.11.81	26.5.82	7
R. T. Gray	26.5.82		

(a) Tasmania had an unbroken succession of Labor premiers, starting with the Ogilvie Ministry (1934) until the electoral defeat of the Reece government on 26 May 1969.

The House of Assembly

The Tasmanian Lower House comprises 35 members elected from five seven-member electorates. The *Constitution Act* 1972 provided that the Assembly chosen at the elections held on 22 April 1972 would continue in office for a maximum term of five years and that thereafter the term for the House of Assembly would be four years.

Elections for the House of Assembly

Elections for the House of Assembly are conducted under a system which can be classified as proportional representation by the single transferable vote (commonly known as the Hare-Clark system).

The essential features of the system are as follows:

- (i) For an elector to cast a valid vote, he must express at least seven preferences.
- (ii) Party groups are identified on ballot papers, with ungrouped candidates listed together on the right of the ballot paper. Candidates' positions within groups are determined by a system of rotation so that in designated 'preferred' positions, all candidates appear on the same number of ballot papers.
- (iii) To secure election, candidates must secure a quota in accordance with the Droop formula (i.e. the total first-preference votes in the constituency divided by eight, plus one vote; see below).
- (iv) Should a candidate secure an exact quota on first preferences, he is declared elected and his voting papers are set aside as finally dealt with.
- (v) Any candidates who secure a surplus of first preferences above the quota are declared elected.
- (vi) For each elected candidate, commencing with the one with the largest surplus, a transfer value is calculated by dividing the successful candidate's number of surplus first preference votes by his total number of first preferences. All his voting papers are then re-examined and the number of next available choice votes for each of the non-elected candidates determined and multiplied by the transfer value. The resulting numbers are added to the non-elected candidates' respective numbers of first preference votes.
- (vii) Where a transfer raises the number of votes obtained by a candidate up to a quota, he is declared elected. That particular transfer is then completed but no further votes of any other candidate are transferred to him.
- (viii) In the case of a candidate who reaches a quota through transferred votes, his surplus votes above the quota are divided by the number of voting papers transferred to him in the last transfer. The resulting fraction is the transfer value which is applied to voting papers he obtained in the last transfer which are then transferred to remaining unelected candidates according to the next available choices.
- (ix) When transfers have been completed in respect of all candidates who obtained a surplus above a quota as a result of the above procedures, the candidate who is lowest on the poll is excluded and his voting papers are distributed to the remaining non-elected candidates according to the next available choices. His own first preference votes are transferred first, retaining a value of one each. Voting papers that have been transferred to him are dealt with in the order of the transfers already carried out and retain the respective transfer values at which he obtained them.
- (x) Steps (vi) and (ix) are continued, as necessary, until either seven candidates are elected or all candidates except seven have been excluded. In the latter case, unelected candidates not already elected are declared elected.

The scrutiny of preferences and distribution of choices cannot commence until all votes are to hand—this does not occur until the Friday following polling day. As might be expected the counting of votes, calculation of transfer values and the transferring of votes are time-consuming operations and a week may elapse before the declaration of a poll.

NOTE: The 'Droop formula' states that the minimum number of votes necessary to secure election is the total number of votes divided by one more than the number of members to be elected, plus one vote.

Advantages of the Hare-Clark System: The major advantage claimed for the system is that the composition of the House of Assembly tends to faithfully reflect the wishes of the electors viewed on a state basis, and that a party with a minority of first preferences is most unlikely to obtain a majority of seats, as sometimes occurs in systems with single-member constituencies. By way of example, South Australia, using single-member electorates has sometimes been governed by parties receiving a minority of votes but a majority of seats; other Australian states have had similar experiences. A further significant advantage is that all electors have a wide choice of candidates *within* the parties, whereas in single-member electorates there is often no choice of candidates for an elector determined to vote for a particular party. In the latter case, an elector may be forced to vote for a candidate whom he considers to be less than competent.

1982 Election

Following a vote of no-confidence in the Holgate Labor Government the Assembly was dissolved. At the subsequent election held on 15 May 1982, the Liberal Party, led by Mr Robin Gray gained a three seat majority and, for the first time formed a government in its own right. Three ministers lost their seats and six new members were elected. First preference votes cast statewide, by party, were as follows: Liberal Party 121 346 (48.5%); ALP 92 184 (36.81%); Independents 23 090 (9.23%); Australian Democrats 13 476 (5.3%). The composition of the new Assembly was: Liberal 19 seats; ALP 14 seats; Australian Democrats one seat; Independent one seat. On 23 December, the Australian Democrat, Dr N. K. Sanders resigned his seat which was filled on a recount of his quota by Dr Robert Brown.

The next table shows the results of House of Assembly elections by parties from 1959:

Representation of Parties for the Whole State: House of Assembly

Election Year	Labor		Liberal		Other (a)	
	Proportionate share (b)	Seats won	Proportionate share (b)	Seats won	Proportionate share (b)	Seats won
1959	15.58	17	14.37	16	5.05	2
1964	17.97	19	13.47	16	3.56	—
1969	15.91	17	14.68	17	4.41	1
1972	19.22	21	13.43	14	2.35	—
1976	18.37	18	15.57	17	1.06	—
1979	19.01	20	14.46	15	1.53	—
1982	12.90	14	16.98	19	5.12	2

(a) Independents and minority parties.

(b) State treated as single electorate and proportionate share of seats calculated on basis of first preference votes cast for parties.

Votes Recorded at Assembly Elections

Voting in general elections since 1959 is shown in the following table:

House of Assembly Elections, Tasmania

Year of election	Electors on roll	Votes recorded		Informal votes	
		Number	As percentage of enrolled electors	Number	Percentage of total votes recorded
1959	180 344	170 559	94.6	9 816	5.8
1964	193 418	184 571	95.5	7 980	4.3
1969	210 268	198 571	94.4	9 248	4.7
1972	216 846	205 803	94.9	7 533	3.7
1976	258 550	244 424	94.5	9 294	3.8
1979	265 428	248 866	93.8	9 582	3.9
1982	283 549	265 101	93.5	15 005	5.7

The percentage of informal votes in the previous table is not particularly high, even though the voting papers for six or seven-member electorates are necessarily more complicated than those for single-member electorates. At elections prior to 1976 voters were required to mark at least three candidates in order of preference. However, an amendment to the *Electoral Act* made prior to that election required voters to mark at least seven candidates in order of preference. This change has had no obvious effect on the number of informal votes cast.

Constituencies of House of Assembly

The five constituencies for the House of Assembly are identified with the five electoral divisions electing members to the Federal House of Representatives. The next table and map show composition and extent of each electorate. The map shows new electoral boundaries that were adopted in November 1977 following an electoral redistribution for the House of Representatives.

House of Assembly: Enrolments by Electorate at 30 June

<i>Electorate</i>	1977	1978	1979	1980	1981	1982
Bass	48 458	53 607	53 441	55 395	56 096	57 183
Braddon	55 511	50 858	51 212	53 321	53 895	55 709
Denison	51 453	54 769	54 355	55 156	55 410	57 137
Franklin	53 063	52 041	52 691	55 010	56 791	58 587
Wilmot	53 524	52 000	52 606	54 201	55 298	57 254
Total	262 009	263 275	264 305	273 083	277 490	285 870

By-Elections

In the case of a vacancy occurring in the House of Assembly, there is provision for the Chief Electoral Officer to publicly invite nominations from candidates who were unsuccessful at the last general election in the constituency which elected the vacating member. If one nomination only is received the consenting candidate is declared elected and the Governor notified to this effect.

If more than one such nomination is received, the Chief Electoral Officer is required to examine the voting papers counted for the vacating member at the last general election. In the simple case—where the vacating member obtained a surplus of first preference votes above the quota—this can be confined to voting papers expressing that first preference. In the more difficult case—where the vacating member did not obtain a quota on first choices—it is necessary to take into account not only original first-choice papers but also all voting papers representing votes transferred to the vacating member.

The vacating member's voting papers, as defined above, are examined and all his votes are transferred to the consenting candidates according to the preferences expressed thereon. Next available choices derived from first-choice votes of the vacating member have a transfer value of one, but from votes he obtained by transfer, only the value at which he obtained them. For the purpose of the count, first-choice votes received by the consenting candidates at the general election are not relevant—the selection is based on preferences as revealed by the voting papers of the vacating member.

When the number of votes in favour of each consenting candidate has been ascertained, the final selection is by the method of the absolute majority through the alternative vote. If no nominations are received from candidates unsuccessful at the last general election, then an election is held to fill the vacancy.

Dissolution of House of Assembly

The Governor may dissolve the House of Assembly whenever he considers it desirable but he has no power to dissolve the Legislative Council. In effect then, the Legislative Council is a perpetual body except that approximately one-sixth of its seats fall vacant annually. As there is no provision for a double dissolution the Legislative Council, by rejection of a Supply Bill, can force the House of Assembly to seek a dissolution without itself needing to face the electorate. This last occurred in 1948. In practice, the Governor considers dissolving the House of Assembly only when requested to do so by his ministers.

House of Assembly, Members

The following table shows members of the House of Assembly and their party allegiance as at 15 May 1982:

Members of the House of Assembly as at 15 May 1982

<i>Electoral Division</i>	<i>Member's name</i>	<i>Party affiliation</i>
Bass	Barnard, Michael Thomas Claude	A.L.P.
	Beswick, The Hon. Richard John	Liberal
	Bushby, The Hon. Maxwell Holmes (a)	Liberal
	Holgate, Harold Norman	A.L.P.
	James, Gillian Hilma	A.L.P.
	Lyons, Brendon Aloysius	Liberal
Braddon	Robson, The Hon. Neil Maxwell	Liberal
	Bonney, Raymond Claude	Liberal
	Cornish, Ronald	Liberal
	Coughlan, John Anthony	A.L.P.
	Davies, Ronald Glen	A.L.P.
	Field, Michael Walter	A.L.P.
Denison	Groom, The Hon. Francis Roger	Liberal
	Smith, Vincent John	Liberal
	Amos, Julian John	A.L.P.
	Bingham, The Hon. Eardley Max (b)	Liberal
	Davis, Geoffrey Bertrand	Liberal
	Devine, John Herbert	A.L.P.
Franklin	Haros, Gabriel George	Liberal
	Sanders, Norman Karl (c)	Aust. Dem.
	Walker, Peter Benson	Liberal
	Aird, Michael Anthony	A.L.P.
	Beattie, John Maxwell (d)	Liberal
	Cleary, The Hon. Thomas John	Liberal
Wilmot	Lowe, The Hon. Douglas Ackley	Ind.
	McKinnon, William Gillies	A.L.P.
	Pearsall, The Hon. Geoffrey Allan	Liberal
	Wriedt, The Hon. Kenneth Shaw (e)	A.L.P.
	Bladock, Darrel John	A.L.P.
	Braid, The Hon. Ian Maxwell	Liberal
Wilmot	Gray, The Hon. Robin Trevor (f)	Liberal
	Lohrey, Andrew Barnard	A.L.P.
	Page, Graeme Reginald	Liberal
	Polley, Michael Robert	A.L.P.
	Salter, Stephen Gordon	Liberal

(a) Speaker.

(b) Deputy Premier.

(c) Dr. Sanders resigned on 23 Dec 1982. The vacancy was filled by Dr. Robert Brown on 5.1.83.

(d) Chairman of Committees.

(e) Leader of the Opposition.

(f) Premier.

Sessions of Parliament

Parliament is required to sit every year and, having risen, must sit again before 12 months have elapsed. When the House of Assembly is dissolved and a general election held, the Governor is required to call Parliament together within 90 days of the dissolution, subject to a discretionary extension of a further 30 days.

The Legislative Council*Annual Fractional Elections*

For the purpose of electing members of the Legislative Council, the State is divided into 19 single-member constituencies. Each member, when elected, holds office for six years and Council elections are held every year to elect three members; every sixth year four members are elected. There are no general elections for the Legislative Council.

Preferential Voting

An amendment to the *Electoral Act* 1907 in 1980 changed the method of determining the positions of candidates' names on ballot papers. Previously the order of candidates' names was determined by ballot. (Prior to a 1973 amendment to the *Electoral Act*, candidates' names appeared in alphabetical order.) The 1980 amendment, however, introduced a system of 'rotating ballot papers' for both Houses. This provides that there shall be different batches of ballot papers on which candidates' names are placed in different positions. Although the system does not provide for all possible permutations, it ensures that all candidates are given an equal opportunity to share in the assumed benefit attaching to being placed in designated 'preferred' positions on a ballot paper. If there are two candidates, the voter need only vote for one. If there are three or more candidates, the voter must indicate at least three preferences to record a valid vote. Unlike ballot papers for House of Assembly elections, candidates' names on Legislative Council papers are not grouped to show party allegiance, nor is there any indication whether or not a candidate belongs to a political party.

If any candidate secures first-preference votes exceeding half the total first preferences, he is declared elected. If no candidate satisfies this condition, then the candidate with the least votes is excluded and the second preferences shown on his voting papers are transferred to other candidates, the transfer value of each such second preference being equal to one. If no candidate then has the required majority, the process of exclusion is repeated until such time as one candidate secures the majority.

The method of counting is identical with that used in elections for the federal House of Representatives and is termed preferential. The full description is election by absolute majority through use of the alternative vote.

By-Elections

In the case of a vacancy occurring in the Legislative Council, a writ is issued directing that an election be held to fill the vacancy. There is no provision for a re-count of voting papers of the vacating member as for the House of Assembly.

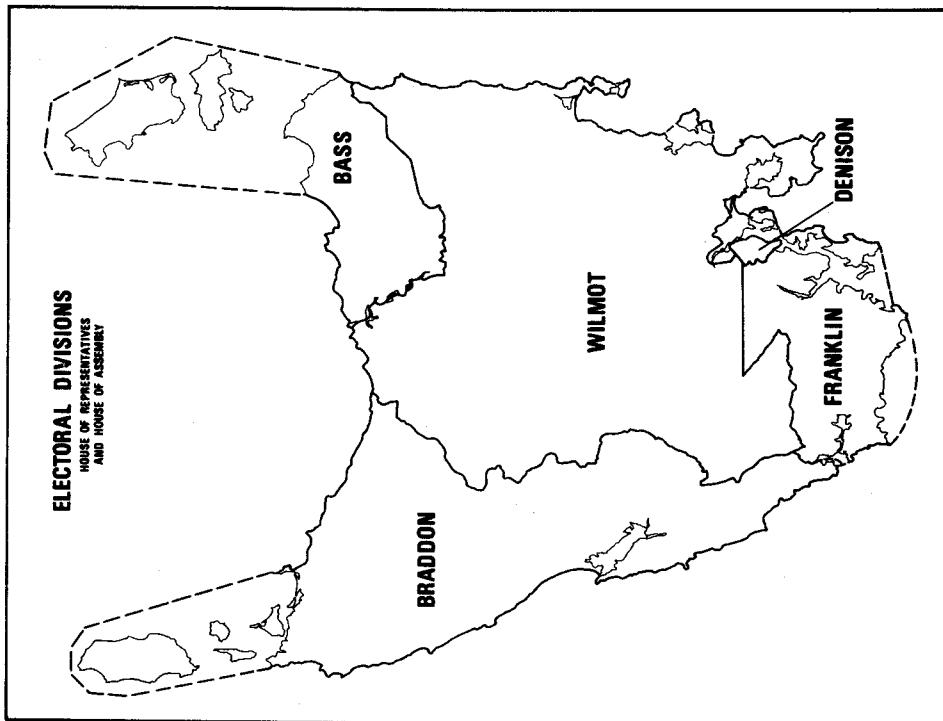
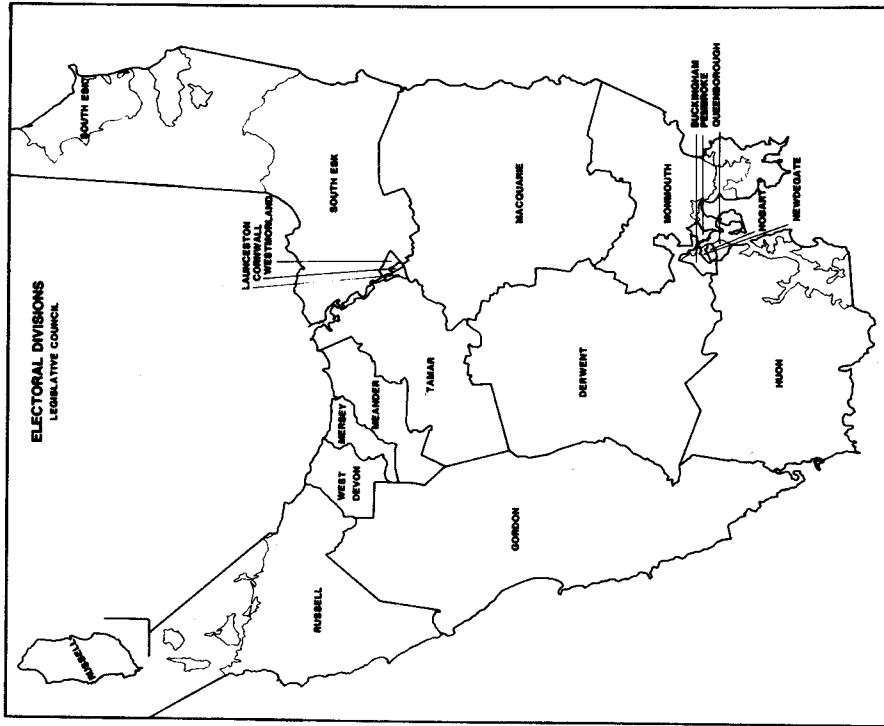
Status of Legislative Council

The Legislative Council has the tradition of being a non-party house; in 1982 the composition of the house was 17 independents and two Labor Party representatives. The leader for the Government in the Legislative Council cannot rely upon a vote taken on party lines to ensure the passage of any government bill. It is the ability to command a majority in the House of Assembly which gives a party the right to form the government of the day and which ensures the passage of government legislation through the lower house; no such certainty exists in the passage of bills through the upper house.

Following conflict between the two Houses of Parliament over a money bill during 1924 and 1925, the *Constitutional Amendment Act* 1926 was passed. This Act defined the relations between the two Houses, especially with regard to the passing of money bills. The following current principles are found in the Act:

- (i) the Legislative Council retains the right to reject any bill, including a money bill;
- (ii) the Council is specifically prevented from amending bills to raise revenue for the ordinary annual services of the Government and bills imposing land and income tax;
- (iii) it can suggest to the house of Assembly that amendments be made but the adoption or rejection of such amendments is at the discretion of the Assembly; and
- (iv) the operation of such bills is restricted to a period of one year.

Apart from the above specific exceptions, the Council retains the right to amend money bills, e.g. those dealing with loan funds or probate. The House of Assembly is given the sole right to initiate bills for the raising of revenue and the imposition of taxes. Finally, the powers of the two houses are declared equal in all matters except for these specific exceptions.



Boundaries, Legislative Council Divisions

In 1980 the Legislative Council established a Select Committee to recommend changes to its electoral boundaries. As a result of the findings of this Committee an amendment to the *Constitution Act* was passed and received Royal Assent on 3 December, 1980. Boundary changes took effect immediately after the Legislative Council elections held on 23 May 1981. The following table shows the number of electors in each division as at 30 June for recent years:

Legislative Council: Enrolments by Electorate at 30 June

<i>Electoral Divisions (a)</i>	1977	1978	1979	1980	1981	1982
Buckingham (H)	14 571	15 544	16 076	16 609	16 245	16 245
Cornwall (L)	11 961	13 948	13 235	13 236	12 731	12 703
Derwent (R)	7 067	6 623	7 438	7 482	13 259	13 304
Gordon (S)	6 044	6 607	6 571	6 479	6 469	6 753
Hobart (H)	13 554	14 061	13 178	13 261	15 692	17 040
Huon (R)	11 507	13 855	13 817	14 300	14 562	15 409
Launceston (L)	14 378	14 781	14 092	14 337	14 570	15 778
Macquarie (R)	7 607	7 684	7 562	8 246	11 136	11 248
Meander (R)	8 694	8 495	8 445	8 709	11 460	11 403
Mersey (DU)	16 018	19 346	19 006	19 442	17 686	17 972
Monmouth (R)	10 653	11 175	12 001	12 081	13 214	13 165
Newdegate (H)	16 653	17 849	17 427	17 051	14 701	13 974
Pembroke (H)	24 663	25 617	24 970	24 853	18 466	19 548
Queenborough (H)	13 523	13 623	13 505	13 581	14 164	13 665
Russell (R)	12 000	12 910	12 796	12 663	13 801	13 445
South Esk (R)	10 461	10 855	10 787	12 256	12 253	12 526
Tamar (R)	8 932	9 821	11 115	11 101	10 995	11 017
West Devon (BP)	14 575	15 134	15 130	15 036	14 745	15 233
Westmorland (L)	11 346	11 996	13 530	13 499	13 639	13 732
Total	234 189	249 924	250 681	254 222	259 788	264 160

(a) (H) = Hobart and suburban; (L) = Launceston and suburban; (BP) = Burnie and Penguin municipalities; (DU) = Parts of Devonport and Ulverstone municipalities; (R) = rural; (S) = special.

Legislative Council Members

The next table shows members of the Legislative Council (following the elections held in the Divisions of West Devon, Tamar, Pembroke and Queenborough on 28 May 1983), the electoral division which they represent and the year in which each will retire from the Council.

Members of the Legislative Council, June 1983

<i>Electoral Division</i>	<i>Member's name</i>	<i>Year of retirement</i>
Buckingham	Lowrie, The Hon. Kenneth Francis (a)	1986
Cornwall	Le Fevre, The Hon. Vernon McKenzie	1984
Derwent	Batt, The Hon. Charles Leo (b)	1985
Gordon	Broadby, The Hon. Albert James	1988
Hobart	Petrusma, The Hon. Hendrik	1988
Huon	Hodgman, The Hon. Peter	1984
Launceston	Wing, The Hon. Donald George	1988
Macquarie	Shaw, The Hon. George Arthur	1986
Meander	Hope, The Hon. Reginald Charles	1985
Mersey	Braid, The Hon. Henry William (c)	1984
Monmouth	Wilson, The Hon. Stephen John	1987
Newdegate	Miller, The Hon. Brian Kirkwall	1987
Pembroke	McKay, The Hon. Peter Charles	1989
Queenborough	Stopp, The Hon. Eric John Chancellor	1989
Russell	Fletcher, The Hon. Anthony William	1987
South Esk	Archer, The Hon. Richard Clive	1986

continued next page

Members of the Legislative Council, June 1983—continued

<i>Electoral Division</i>	<i>Member's name</i>	<i>Year of retirement</i>
Tamar	Coates, The Hon. Jeffrey Allan	1989
West Devon	Hiscutt, The Hon. Hugh James	1989
Westmorland	Gregory, The Hon. Oliver Harold	1985

(a) Leader for the Government in the Legislative Council.

(b) Endorsed by the Australian Labor Party; other members are independents.

(c) President.

Qualifications of Electors and Members

Qualifications of Electors, State Elections

An elector for both the House of Assembly and the Legislative Council is any person, aged at least 18 years, male or female, who has lived in the State for six months continuously, who is natural-born or a naturalised subject of the Queen and whose name is on the electoral roll for an electoral division. (Legislation reducing the voting age to 18 years passed both Houses of Parliament in mid-1973.) Voting has been compulsory since the passing of the *Electoral Act* 1928. Special qualifications which had previously been required for electors of the Legislative Council were abolished on 1 July 1969 following amendments to the *Constitution Act* 1934 and the *Electoral Act* 1907.

Qualifications of Members, State Parliament

House of Assembly: To be eligible for election as a member of the House of Assembly, a candidate must comply with the following conditions: he must either be an elector or be qualified to be an elector for the House of Assembly and resident in Tasmania for five years at any one time or resident for two years immediately preceding the election.

Legislative Council: A candidate for the Legislative Council must be an elector or have the qualifications of an elector for the Council; in addition he must meet the residential restrictions imposed on candidates for the House of Assembly.

Persons of unsound mind or in prison under any conviction are barred from voting at elections for either house or from being elected to either house. No person shall be a member of both houses at the one time.

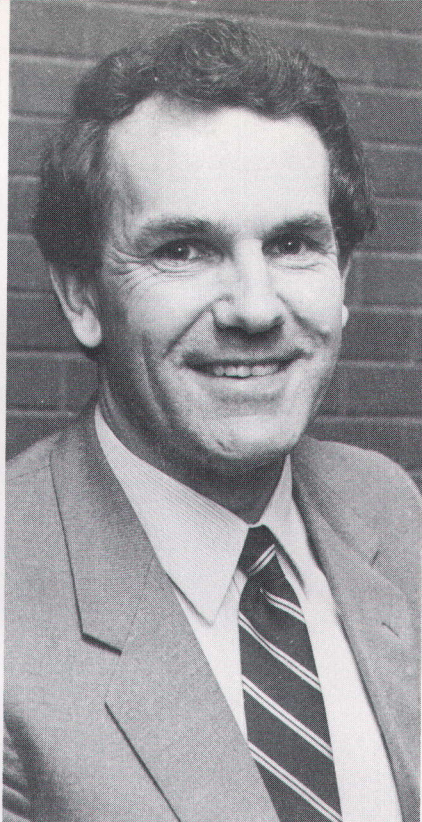
Salaries of Members of Parliament

Under provisions of the *Parliamentary Salaries and Allowances Act* 1973, a basic rate of pay to members is calculated annually. This basic rate is set as the 'interstate average' of the rates payable to ordinary 'back bench' members of the Legislative Assemblies of New South Wales, Victoria, Queensland and Western Australia and the House of Assembly of South Australia. Calculation of the interstate average is the responsibility of the 'salaries committee' comprising the Government Statistician, Clerk of the Legislative Council and Clerk of the House of Assembly. The committee is required to meet as soon as practicable after 15 June each year and make the necessary calculation. A report on the method adopted to make the calculation and the interstate average is then forwarded to the Auditor-General who may accept the calculation or himself make a calculation replacing that of the salaries committee. Having either accepted the salaries committee's calculation or substituted one of his own, the Auditor-General is required to publish in the *Government Gazette* the appropriate interstate average which then becomes the basic salary for payment of parliamentary salaries and allowances. The basic rate applicable from 1 July 1981 was \$28 621. In July 1982 however, the *Parliamentary Salaries and Allowances Amendment Act* 1982 which prevents the annual adjustment from taking place was passed. The effect was to hold members salaries at \$28,621 for a further 12 months.



Tasmanian Senators being sworn in, April 1983
 From Left: J. Coates, J. M. Hearn, J. Watson, M. Townley, M. Tate, M. S. Walters, R. W. B. Harradine,
 Dr D. J. Grimes, P. E. Rae, Inset B. R. Archer.

(Australian Information Service)
 (Inset, Hobart Mercury)

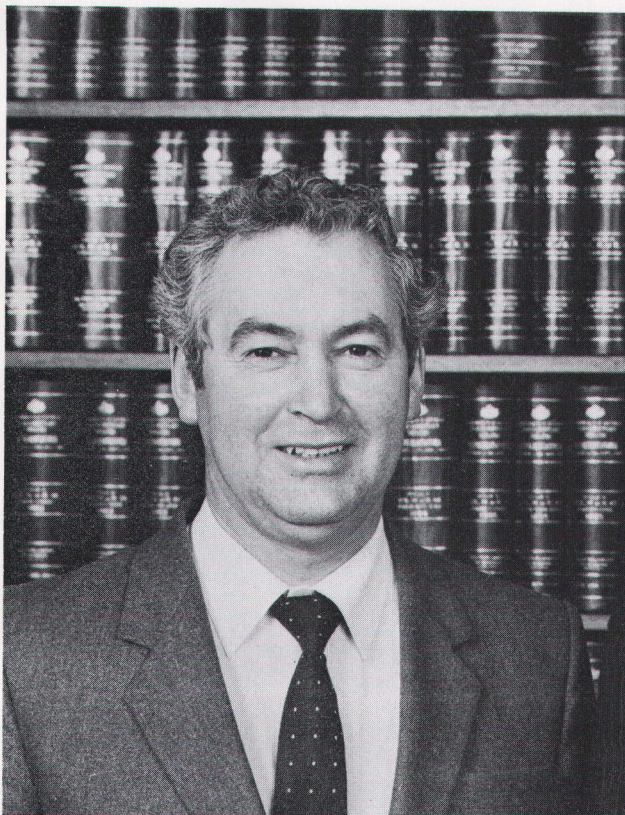


TASMANIAN MEMBERS OF THE HOUSE OF REPRESENTATIVES

Mr K. Newman - Bass,

Mr R. Groom - Braddon,

*Mr M. Burr - Wilmot,
(Advocate Newspaper)*



Mr B. Goodluck - Franklin,

Mr M. Hodgman - Denison.

(Tasmanian Government Stills Photographic Section)



MEMBERS OF THE HOUSE OF ASSEMBLY

From left: Inside row: The Hon. R. T. Gray, The Hon. E. M. Bingham, The Hon. G. Pearsall, The Hon. N. Robson, The Hon. T. J. Cleary, The Hon. I. Braid, The Hon. R. J. Beswick, The Hon. F. R. Groom, A. Lohrey, M. Aird, M. Field, J. Amos, M. Holgate, The Hon. K. Wriedt

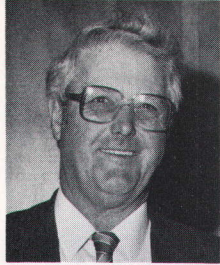
Outside Row: R. Cornish, S. Salter, R. Bonney, G. Davis, G. Page, V. Smith, P. Walker, J. Beattie, Dr N. Sanders, D. Lowe, J. Coughlan, M. Polley, J. Devine, G. James*

Speaker: M. Bushby

Absent Members: D. Baldock, M. Barnard, R. G. Davies, G. Haros, B. Lyons, W. McKinnon

**Dr Sanders resigned and was replaced by Dr R. Brown, Jan 1983.*

(Tasmanian Government Stills Photographic Section)



MEMBERS OF THE LEGISLATIVE COUNCIL (MAY 1982)

From left: The Hon. C. Batt, The Hon. H. Petrusma, The Hon. S. Wilson, The Hon. R. Hope, The Hon. V. M. LeFevre, The Hon. W. Young, The Hon. J. Coates, The Hon. P. Hodgman, The Hon. K. Lowrie, The Hon. W. Hodgman (President), The Hon. G. Shaw, The Hon. R. Archer, The Hon. P. McKay, The Hon. O. Gregory, The Hon. A. Broadby, The Hon. B. Miller, The Hon. A. Fletcher, The Hon. D. Wing, The Hon. H. Braid

At the 1983 elections, The Hons. W. Young and W. Hodgman retired and H. Hiscutt and G. Stopp (insets) were elected. The Hon. H. Braid was elected President.

(Tasmanian Government Stills Photographic Section) (Insets; Advocate, Hobart Mercury)



STATE CABINET

From left: The Hon. I. Braid, The Hon. N. Robson, The Hon. E. M. Bingham, The Hon. T. J. Cleary, The Hon. R. T. Gray, The Hon. R. J. Beswick, His Excellency, Sir Guy Green K. B. E. (Lt. Governor), The Hon. F. R. Groom, The Hon. G. Pearsall.

(Hobart Mercury)

Special Rates Payable in Addition to the Basic Salary (a)
(Per Cent)

<i>Particulars</i>	<i>Additional salary payable as proportion of basic salary (b)</i>	<i>Particulars</i>	<i>Additional salary payable as proportion of basic salary (b)</i>
Cabinet—		House of Assembly—	
Premier	125	Speaker	33½
Deputy Premier	85	Chairman of Committees	20
Ministerial office	70	Leader of the Opposition	70
Secretary to Cabinet	30	Deputy Leader of the Opposition	17
Legislative Council—		Government Whip	6
President	33½	Opposition Whip	6
Leader of the Government ..	70		
Chairman of Committees	20		
Deputy Leader of the Government	11		

(a) The basic salary was set at \$25 949 in July 1980 and raised to \$28 621 from July 1981.

(b) Salary in excess of basic rate (e.g. the Premier receives basic rate + 1.25 × basic rate), i.e. \$64 397 from July 1981.

Allowances Payable to Members: Electoral allowances, and entertainment allowances are calculated as a proportion of the base rate. Travel allowances are related to rates payable to permanent heads of State Government Departments. The next table shows the electoral allowances payable as a proportion of the basic salary:

Electoral Allowances Payable as a Proportion of the Basic Salary (a)
(Per Cent)

<i>Electoral division</i>	<i>Proportion of basic salary payable</i>	<i>Electoral division</i>	<i>Proportion of basic salary payable</i>
Legislative Council—		Legislative Council—	
Buckingham	13	<i>continued</i>	
Cornwall	12	Queenborough	11
Derwent	18½	Russell	26
Gordon	26	South Esk	26
Hobart	11	Tamar	18½
Huon	18½	West Devon	17
Launceston	12	Westmorland	14
Macquarie	20	House of Assembly—	
Meander	22	Bass	26
Mersey	17	Braddon	30
Monmouth	24	Denison	15
Newdegate	11	Franklin	21
Pembroke	13	Wilmot	35

(a) The basic salary was set at \$28 621 in July 1981.

Departments

The system of responsible government in Tasmania requires that the executive power of the State shall be exercised by the Cabinet; in exercising this power, the ministers of the Cabinet are held responsible for the actions and administration of government departments and other governmental authorities which have been created for three basic purposes: (i) to put into practice the laws made by parliament; (ii) to give effect to the decisions of the ministry; and (iii) to advise the ministry on matters of policy.

The next section lists the departments and authorities under the various ministers but the allocation of responsibility is subject to change and Cabinet has the power to vary it at any time. A table in the earlier section 'The Cabinet and Executive Government' lists the names of ministers holding the various portfolios.

Cabinet Portfolios and Responsibilities at 1 February 1983

<i>Premier, Treasurer, Minister for Energy, Minister for Racing and Gaming</i>	
Premier's Department	Treasury Department
Public Service Board	Hydro-Electric Commission
Audit Department	Racing and Gaming Commission
The Ombudsman	Racing Trust
	Totalizator Agency Board
<i>Deputy Premier, Attorney-General, Minister for Education, Minister for Industrial Relations</i>	
Attorney-General's Department	Solicitor-General's Department
Education Department	Parts V and VI of the Public Service Act
Department of Labour and Industry	State Library
Prisons Department	Council of Advanced Education
Public Trust Office	University of Tasmania
Registrar-General's Department	Museum and Art Gallery
Supreme Court and Sheriff's Department	Tasmanian Arts Advisory Board
<i>Minister for Tourism, Minister for National Parks and Recreational Lands, Minister for the Environment, Minister for Licensing, Minister for Housing</i>	
Department of Tourism	Environment
Licensing Board	Division for Housing
National Parks and Wildlife Service	
<i>Minister for Industry and Small Business, Minister for Inland Fisheries</i>	
Department of Industrial Development	Motor Accidents Insurance Board
Inland Fisheries Commission	Premiums Board
Agricultural Bank	Electoral Department
Tasmanian Government Insurance Office	Consumer Affairs Council
<i>Minister for Health, Minister for Community Welfare and the Elderly, Minister for Ethnic Affairs</i>	
Department of Health Services	Department of Social Welfare
Mental Health Services Commission	Division of Handicapped Persons Services
<i>Minister for Construction, Minister for Main Roads, Minister for Local Government, Minister for Lands</i>	
Division of Construction	Division of Municipal Planning
Department of Main Roads	Town and Country Planning Commission
	Department of Lands
<i>Minister for Primary Industry, Minister for Forests, Minister for Sea Fisheries, Minister for Water Resources</i>	
Department of Agriculture	North-West Regional Water Authority
Forestry Commission	Dairy Industry Authority
Tasmanian-Fisheries Development Authority	Egg Marketing Board
Rivers and Water Supply Commission	Tasmanian Apple and Pear Marketing Authority
Metropolitan Water Board	Tasmanian Grain Elevators Board
	Tasmanian Herd Improvement Organisation
<i>Minister for Mines, Minister for Transport, Minister for Administrative Services, Minister for Police and Emergency Services</i>	
Mines Department	Royal Botanical Gardens
Transport Tasmania	Police Department
Metropolitan Transport Trust	State Emergency Services
Government Printer	Tasmanian Fire Services
Department of Supply and Tender	

THE LEGISLATIVE COUNCIL

During the debate on the Gordon-below-Franklin power scheme, the Legislative Council assumed an important and at times controversial role in Tasmanian politics. One effect of this prominence was controversy concerning its role and status within the parliamentary structure to the extent that its powers relating to money bills were placed under the scrutiny of a Royal Commission.

The following article, critically examining the role of the Legislative Council, was prepared by Dr R.J.K. Chapman, Senior Lecturer of the Department of Political Science at the University of Tasmania.

Introduction

Tasmania was the second Australian settlement to be proclaimed a separate British colony. It was detached from New South Wales by the *NSW Judicature Act* of 1823 which recognised Tasmania's geographical and judicial autonomy. This was endorsed by the Crown in 1825 when Governor Darling came out from England with two separate Commissions as Governor of New South Wales and Governor of Van Diemen's Land (as Tasmania was then known). On his way from England to his post in Sydney, Darling called in at Hobart Town on December 3, 1825 to read the Proclamation making Van Diemen's Land a separate colony independent from New South Wales. Subsequently a Lt.Governor was appointed and he was advised by an Executive Council and a Legislative Council.

The Executive Council was a council of the Crown meeting *in camera*, comprising five members appointed by the Lt.Governor as Queen's representative in the Colony. Initially, the appointees were the Chief Justice and Colonial Secretary as *ex officio* members; the Colonial Treasurer, the Senior Officer of Her Majesty's Forces and the Lord Bishop, once the Diocesan See of Van Diemen's Land had been established. The Lt.Governor was its Chairman.

The Legislative Council was also wholly nominated at the beginning, comprised of not less than five and not more than seven members. The early Councils therefore had overlapping membership and of the five Executive Councillors the Chief Justice, Colonial Secretary, the Colonial Treasurer and later, the Attorney-General, were members of both. The Lt.Governor was also the President of the Legislative Council.

In 1828, when the so-called *Huskinson Act* was passed in the Imperial Parliament, it changed the composition of the Council to make it more representative for the purpose of advice to the Governor. As the Secretary of the Colonies of the time impressed on Governor Arthur, the increase of numbers to not less than 10 and not more than 15 was to allow members 'to be fairly selected from the more intelligent, wealthy and respectable members of the Commerical, Agricultural and Professional bodies of the Colony'. This would not only produce a legislature which 'more adequately represented the various interests of Colonial society' but also would be 'likely at once to receive a salutary influence from public opinion and to exercise some control over it.'

The Council was increased to fifteen members in these early years, consisting of six official or nominees of the Lt.Governor and eight non-official appointees. While in no way an elected representative group, the non-official members were not necessarily supportive of the Executive, as we shall see. This nominee system eventually gave way to what became known as the blended Council in 1851. In this Council there was an enlarged group of sixteen elected members with the eight nominees, including the officials, although now excluding the Lt.Governor. This was to be short-lived, lasting only four years before a fully elected Legislative Council was established along with the House of Assembly in 1856.

Growth and Consolidation

The period from 1823 to 1837 when Sir John Franklin became Lt.Governor after Arthur, was one in which the Legislative Council played a subordinate role. The Executive

authority exercised by Governor Arthur was dominant and he would not allow matters to fall from his grasp.

When Franklin came to office the provisions of the *Huskisson Act* were already in force with the enlarged Council and this, combined with his own predilection for more public involvement, produced a different climate. While Arthur had been forced to implement the 1828 Act and enlarge the Council, his dominance had remained, but the Council were anxious to extend their influence. The opportunity came with the more relaxed attitude of Franklin and his rather inept political approach to the use of his authority.

By 1840 the public interest in Council Proceedings was so great that the attendance could not be accommodated in the Chamber adjoining Government House. The Council was moved to the more spacious Long Room in the recently erected Customs House, which remains its Chamber to the present day. The move distanced the Council from Government House, made it easier for public access and gave the Councillors a more dignified environment.

It was during this period that notions of representation of the people, guardian of the people's rights and privileges and self government emerged. Ideas such as these were voiced by the non-official members who were increasingly subjected to public pressure. This came from the strained economic circumstances in which Franklin found himself, pushed from England to find more money locally for services and resisted by the free settlers who were unwilling to be taxed to pay for police and gaols. Agitation for legislation by representation and the subjection of the Executive to the legislature in the English style became common.

These views were encouraged by Franklin's own actions in publicising the work of the Legislative Council. Not only were all comers admitted to the Council proceedings, but also the press were expected to provide verbatim reports. It is not surprising therefore that the Executive Council and Legislative Council began to clash, culminating in 1845 in a supply crisis after Governor Franklin had been replaced by Sir John Eardley-Wilmot.

The financial situation was such that the new Governor had to propose increases in taxation to pay for services, prominent amongst which were police and gaols, as well as road works. The Legislative Councillors argued strongly, knowing that they had public support, that such matters were the concern of the Imperial Government, not the responsibility of the free settlers. In the Council debate, when the new Governor cast his double vote to ensure passage of his Appropriation Bill, six of the non-official members walked out of the Council Chamber leaving the Lt. Governor without a quorum to obtain supply. This caused the intervention of the Imperial Government and the Secretary of the Colonies (at the time Mr. W. E. Gladstone) concluded that 'the nominated Council and independent executive are no shields to authority but sources of weakness, disorder, disunion and disloyalty.'² Disappointed as he was to find the presumptions about similarity of interests between the Executive and nominated Councillors unfounded for the colonies, the actions of the 'Patriotic Six', as they became known, produced a change of policy and funds were provided by the Imperial Government for police and gaols.

The change of policy was affected, perhaps, by other matters including the gradual reduction and phasing out of transportation and moves to representative government. The *Australian Colonies Government Act* of 1850 established the blended Council as part of this trend, although the Governor at the time, Denison, like Arthur, was unwilling to relinquish executive authority easily. As has been pointed out, the key issue in establishing the role of the Council during these years was the extent to which the Governor was prepared to allow the Council to restrain the exercise of his powers.³

Despite the 1850 Act Denison, who replaced Wilmot in 1847, was sufficiently strong-willed to resist Council attempts to control the Executive or appropriation. He had carefully worked out the fixed salaries which should be a first call on consolidated revenue. By this means he hoped to protect the important posts of government, such as his own, the judges, the senior officials, from interference by the newly elected Legislative Council. At the same time, this ensured support from the nominees and Executive Council. As well,

he limited the need for legislative action, minimising the opportunity for debate in the Council; indeed, it is significant that in the late 1840s and early 1850s, when the transportation issue was of such public concern, the debate was carried on more outside the Council Chamber than inside.

However, in the dying year of the blended Council, they were called upon to vote on the end of transportation against the will of the Executive Council. In 1853 a motion for the cessation of transportation was presented to the Council and forced to debate by the elected members. Two official members failed to vote with the Executive against the proposal, the Chief Secretary absented himself from the vote and the Clerk of the Executive Council voted for cessation. The Governor arranged for leave of absence, pending suspension, for the Chief Secretary and suspended the Clerk. The Governor felt they were duty bound to support him otherwise they had no right to sit as government nominees. Needless to say, Legislative Councillors felt otherwise and passed a vote of no-confidence in the Governor by twelve votes to nine. They argued that what Denison had done was 'highly derogatory to the necessary privilege of this Council and even an interference of the Executive government with that freedom of speech and vote without which the Council must cease to possess the confidence of the Colony'.⁴ A sentiment that echoes through the years to the present times.

The Council in Operation

During the years to 1850, and especially after 1837, the Council met an average of 32 days per year, usually during the months of July, August, October and November and sometimes into December.

The exact number of days differed considerably, as can be imagined, according to the nature of the Lt. Governor of the time, and this applied to the business conducted as well. Meetings invariably took place in the afternoon beginning at one o'clock and ending at three. The basic rules of procedure in the Council were laid down by the Act of 1828 which provided for a quorum of two-thirds of members present. This was the rule invoked by the 'Patriotic Six' which precipitated the first major constitutional crisis in 1845 mentioned above.

Voting was to be by a simple majority and any dissenting voice could have his reasons minuted. In addition the Council was able to pass its own standing orders which provided for rules of debate, speaking, motions and legislative procedure. The President (the Lt. Governor) was to decide points in dispute and generally have control of the business through the Clerk of the Council (not to be confused with the Clerk of the Executive Council).

The Clerk's tasks were to keep a book in which he entered the Orders of the Day; to prepare the text of bills; to read out the titles in Council; to keep a Journal of proceedings, including minutes of any committees; and publish weekly abstracts of the Council's votes and proceedings in the Government Gazette.

Once the blended Council was established the operational mode changed. This was signified by the replacement of the President of the Council (the Lt. Governor) by a Speaker elected by the members. The Governor therefore had much less control over the business in the Council and could not directly join in debate as he had in the past.

The change was also signified by the ceremonial opening of the new Council where great store was set by the newly furnished Chamber with the Speaker's chair on the dais to the right of the Governor. Richard Dry, one of the 'Patriotic Six', was elected as first Speaker of the Council. (He was later to become the first Premier of Tasmania in 1856.)

The Council still met during the same months in the afternoon, but usually at four o'clock. However, the sitting days were more extensive and averaged fifty-nine days a year over the four years of its existence.

Bicameralism

On December 2, 1856 (33 years almost to the day from the proclamation establishing the separate colony) the two chamber Parliament of Tasmania (as the colony had been

renamed) met for the first time. Elections for both Houses were held and there were no nominees in either House. Fully representative and responsible self government had been achieved.

Preparations for this moment had been in train since 1853, when a Select Committee of the blended Council comprising ten members, only two of whom were nominees, reported on a new draft of the Constitution. The proposals were not all accepted but formed the foundation for the bicameral system and indeed, for the self-perception of the Council to this day.

First was the proposal for an Upper House which the report assumed would be additional to the existing Legislative Council since that would become the Lower House. The Lt.Governor was to have the authority to prorogue both Houses but only to dissolve the Lower House. There were to be twelve members of the Upper House with thirty in the Lower. The franchise for voters for the Upper House was to be limited to those persons owning freehold to the value of £25.0.0. All twelve members were to be elected from the whole of the State for a period of six years. No Bills for raising or appropriating monies were to originate in the Upper House.

It was agreed that there was no analogy possible between the Upper House and the House of Lords in Britain. The Committee argued 'It would be wrong in principle and destructive of the best interests of society to vest in a privileged and irresponsible class those powers which are inherent in the people'.⁵ The Committee also proposed that provision should be made to remove the Lt.Governor upon an address carried by two-thirds of both Houses and also attempted to limit the powers reserved for the Crown.

In view of the sentiments so strongly expressed, it is not surprising soon after he arrived that Denison drew the attention of his Secretary to the Colonies in England, to 'an essentially democratic spirit which activates a large mass of the country [Tasmania]'.⁶ It was exactly this spirit, expressed through the then blended Legislative Council which led him to support proposals for a second chamber. He thought such a chamber would curb the excesses of that body in a bicameral system.

Each step along the way to representative and responsible government was therefore seen by the Government of the day as an attempt to further constrain the proper exercise of Executive authority and by the elected members of the Council as properly limiting the excessive authority of the Executive. The debate in the blended Council over the Committee Report illustrated these forces at work and the final compromise represented an attempt to balance the desire for complete self government and recognition of the authority of the British monarchy.

'We claim full management of our affairs as inhabitants of this colony; but as subjects of the Queen, and as members of the Empire at large, we acknowledge the necessity of Imperial control over matters of Imperial cognizance.'⁷

The Report, which led to the *Constitution Act*, reinforced this acceptance of the supreme authority and proposed an Upper House which would balance the more active and populist Lower House.

The Upper House was therefore designed to be a conservative brake on 'hasty' legislation and it was thought it would function better if it had a permanent, indissoluble and continuing character.

'The instincts of the Assembly will be movement-progress-innovation; generally, it is hoped, of a useful character, but subject nevertheless to the defect incidental even to improvement when suddenly introduced. The instincts of the more conservative body will be caution-deliberation-resistance to change if not fully and fairly proved to be beneficial.'⁸

To ensure this sober approach members standing for Council should have attained at least thirty years of age, be possessed of real property, and be chosen by constituency of freeholders for a period of six years retiring in rotation at fixed intervals.

The nature of the power of the Legislative Council was left undefined by the *Constitution Act*. In part presumably due to the difficulty of arriving at a clear statement, but much was also said about the basis of responsible government being achieved by practice rather than enactment.

These two major features of the process of establishing the bicameral system with an Upper House have remained as significant points of tension between the two Houses. While practical responses to situations as they arise may be an appropriate and democratic method it can and has produced some unwanted crises. At these times the difficulty of justifying *both* the existence of the Legislative Council on the grounds of its capacity to hinder change *and* practice rather than enactment as a means of resolving differences becomes obvious. If it is to be a House where caution-deliberation-resistance to change are the dominant themes then experience has shown enactment of some kind is a necessity.

The Legislative Council as an Upper House

Despite the fact that the radical members of the blended Legislative Council in the 1850s appear to have seen themselves as the core of a Lower House rather than the precursor of the Upper, there is an air of continuity and permanence pervading the present Legislative Council. It has been sitting in the same Chamber since 1837 and from earlier descriptions its outward appearance has not significantly altered. The President's chair, carved in blackwood, retains the three symbols of loyalty—the rose, the thistle and the shamrock; the large portrait of Queen Victoria in her early years presented in 1854 remains to dominate the Chamber; and the red plush, ornamental settees are still used. The atmosphere is one of calm deliberation rarely disturbed by passion. Views are occasionally strongly voiced and there are sharp exchanges uninhibited by party affiliations, since all but one or two of the members have no overt party membership.

Permanence and continuity of environment have also been reflected in Council membership. Since 1856 at least thirteen members sat for more than twenty years, and one or two have served over thirty.

Although in recent years the average age of Councillors is gradually reducing, it still indicates the self-perception of the Council as a repository of the wisdom of age. In February 1979 the average age was 56.5 compared with 53.0 in 1969, 56.5 in 1954 and 62.0 in 1938.⁹

The composition of its membership has been largely from the more conservative elements of society as was originally envisaged by the framers of the Constitution. There are still the same major interests represented as mentioned even as far back as 1828—Commercial, Agricultural and Professional bodies of the Colony. One of the later characteristics is the increasing number of members who have direct or previous connections with local government.¹⁰

There has been little change from the independence from party affiliation most members have been anxious to emphasise. While Labor Councillors have been elected to the Council since 1907 they have never exceeded five of nineteen and more often only one or two.

The question of party political independence is a central characteristic of the claim made by Councillors that the Legislative Council is the people's House rather than a party House as is the Assembly. The 1982 Royal Commission addressed this question and found that 'the Councillors have, by and large, not subjected themselves to any political party. ... We agree with the views of all those who said that an Upper House that is not controlled by political parties has much to commend it. ... It seems to us ... that the function of legislative review is best carried out by persons who are not committed to support or oppose the proposed legislation coming from the other House.'¹¹

Whether or not there is agreement with the Commission, everyone agrees that the existing method of elections plays a significant part in maintaining independent membership in the Council.

Elections

For the purpose of electing members of the Legislative Council the State is now divided into nineteen single member constituencies. Each member when elected holds office for six years and elections are held every year to elect three members; every sixth year four are elected. There are no whole or half Council elections in order to maintain continuity and a feeling of permanence.

From the initially limited franchise related to freehold property ownership, full adult suffrage was introduced in 1968. Voting was made compulsory in 1928 and enrolment of electors in 1938. The method of voting is preferential with a valid vote having to record at least three preferences where there are three or more candidates. Candidates' names are ungrouped and no reference is made to their endorsement by a political party (where this is the case). Any candidate who secures first preference votes exceeding half the total first preferences is elected. Where no candidate secures this number, the candidate with the least votes is excluded and second preferences are transferred to other candidates. This process is repeated until such time as one candidate secures a majority.

The arguments about the independent and representative nature of Councillors is not therefore related today to who votes for them or how the election is conducted. These were certainly appropriate criticisms in the past. Since 1968, however, they no longer hold. Irrespective of this the nature and characteristics of Councillors has not itself changed appreciably.

Another related argument seen as a deficiency in the election of Councillors is the undemocratic nature of the Council compared with the House of Assembly, arising from the considerable differences in the number of electors in several of the Council electorates. The electoral boundaries have been the subject of considerable discussion over the years resulting in five boundary changes. (1908, 1909, 1946, 1967 and 1980.) The reason for the discussion has been that the Constitution Acts have made no reference to how they might be changed.

Up until 1901 the original intention to have the number of members of the Upper House half that of the Lower House had been maintained. After Federation the linking of the House of Assembly electoral boundaries to those of the Commonwealth, and the introduction of the Hare-Clark system of voting in 1906 broke that nexus, as was formally acknowledged in 1958. In the *Constitution Act* of 1934 eighteen electoral divisions were defined (increased in 1946 to 19) but the Act still retained the requirement that any changes in boundaries be by amendment rather than proclamation (as is the federal arrangement under the *Commonwealth Electoral Act*). This means that the Legislative Council must itself accept proposals for boundary alteration and since there is no provision for an on-going review nor any guidelines on what criteria are to be used in redrawing boundaries, the whole operation becomes one of great and unnecessary complexity.

An illustration of the problem is contained in the Report of the Legislative Select Committee on Legislative Council Boundaries, 1980. The Council in establishing that Committee restricted its discussion of the basis for delimitation of boundaries by ordering them to maintain the principle of community of interest as the major criterion. The Committee itself resolved

‘that when recommending alterations to Legislative Council boundaries the principles of community of interest, area representation and access by electors to their representatives take precedence over equality of elector numbers.’¹²

It is not surprising therefore that the Royal Commission into the *Constitution Act* 1934 found that rural electors had, on average, an electoral population 18% less than the average for the State and urban electorates 10% above that average. The problem is clearly illustrated in the following Table:

	<i>Electors</i>	<i>Mean</i>	<i>Highest Seat Over Mean</i>	<i>Lowest Seat Under Mean</i>	<i>Seats Outside Standard of Lower House.</i>
Pre 1967	160 520	8 448	103%	66%	13
Pre 1980	252 997	13 315	87%	49%	9
Present	262 081	13 793	37%	49%	9

Source: J. Roach

Derived from: *Report on Parliamentary Elections*, No. 3 of
1970, Appendix B.

Select Committee Report, op.cit., Annexe H.

If it is also noted that the variation in House of Assembly and Federal Constituencies in Tasmania is less than 6%, the above figures indicate that Legislative Councillors have not moved nearer to one vote one value despite the five boundary changes.

Whether this does have an effect on the independent character of the Councillors is not clear. The Royal Commission found that, although the issue of whether the Council was less democratic was not a prime consideration for them, the Council may 'broadly be described as a democratic body' even with these significant differences. Nor did they treat the electoral issues as directly related to the independent nature of the Council.¹³

Two contrasting styles in conflict

There can be no argument that the Council is independent of political party allegiance and that this independence, in part at least, is the reason why certain types of candidate stand for election. Those who wish to become Legislative Councillors see themselves differently from the party politicians in the House of Assembly. They perceive their task as completely different. They are there to provide cautious deliberation, to resist innovations which are thought to be against the best interests of the people of Tasmania. These movements to change, derived from the party House, and to which progressive parties are committed, might result because of their commitment, in hasty and ill-conceived action. Executive authority has to be restrained so that it is made responsive to the people. The Legislative Council is the people's House compared to the House of Assembly which is the party House.

The need for caution-deliberation-resistance to change is even more important at a time when the demands of the social and economic environment place governments under stress. Executives are more likely to respond by using their authority without recourse to the Legislature and the relationship between them and Parliament deteriorates. The demands placed on governments require greater expertise and politicians are forced to rely to a greater degree than ever on Executive departments and authorities. These produce an imbalance between the Executive and Parliament in favour of the former. In these circumstances a strong and independent Legislative Council able to provide the restraints can be contrasted to a House of Assembly dominated by political party considerations to the exclusion of all else.

Those who take this view argue that the Council provides a means of democratic control and the enhancement of the notion of government under law that is not available through any other constitution in Australia. If the Legislative Council were to be dominated by political parties it would be no different from the Lower House — it is the very independence of its members that is the essence of its value. They suggest that if the government party dominated the Council it would be another rubber stamp and if the opposition party, then merely obstructive. It is interesting to note the similarity of these opinions to those expressed in the 1854 Report by which an Upper House was justified.

An alternative view is that the justification for an Upper House in the twentieth century needs more than the repetition of argument derived from the nineteenth. Control over the Executive has to be reconciled with efficient and responsible government. There is no other machinery available at the present time for formulating policies that can be

presented to the people for democratic choice than the party. It is precisely the social and economic environment mentioned above which requires a policy response rather than a parochial and legislative one. Legislative Councillors are elected mainly on their personal qualities, certainly not on their stand on policy issues. They do not have a mandate for any particular policies and therefore cannot claim one specifically to thwart or obstruct those of an elected government. And this is especially so when their electoral system is so at odds with the one vote one value principle.

These arguments assume even greater potency if Upper Houses have veto powers over legislation and particularly the ability to reject supply, appropriation and taxation bills without themselves having to face an election. The fact that the Council might not have used these powers frequently over the years is no justification for maintaining them. It is exactly the fact that the use of these powers is so uncertain, arising from the context of time, from practice rather than enactment, that strengthens the argument for removing them. As several of the State Premiers who gave evidence to the 1982 Royal Commission indicated, this very uncertainty has forced governments at times 'to compromise important matters because the whip hand has been held by Councillors'¹⁴

It was never intended that the government of the day should have the primary responsibility to both Houses, otherwise why give the Governor power to dissolve only the Lower House? If it had been the intention then, as democratically inclined as we have seen them to be, the framers of the Constitution in 1854 would have made the Upper House subject to the same electoral judgment.

Deadlocks

The arguments set out above for and against the role and functions of the Upper House are neither academic nor petty political bickering. They derive from deep-seated and fundamentally opposite views of the purpose of Upper Houses, and these have crystallised around the question of resolving deadlocks between the Houses. Deadlocks arise as a consequence of either one or both Houses refusing to compromise on a matter of dispute between them, whether on a money bill or any general legislation.

Because disputes are bound to arise, a mechanism for breaking such deadlocks has been devised and written into the Standing Orders of both Houses. The procedure is that once a deadlock occurs a Free Conference of Managers is called. This comprises not more than four members from each House who select their own chairman, who has a deliberative vote only.

The Standing Orders require the Conference of Managers to 'confer freely with one another upon matters before them and they must endeavour to reconcile all differences or effect some compromise so that, if possible, an agreement between the Houses can be brought about.'¹⁵ Such Conferences have been called many times. Appendix S to the 1982 Royal Commission Report shows that during the years 1947-1981 there were 107 or 3.1% of the bills presented to the House which were rejected by the Legislative Council. These led to 91 Free Conferences of which only 13 failed to reach a compromise, or lapsed for want of prosecution by one side or the other. The figures also indicate that it was the House of Assembly which conceded more often than the Legislative Council although the norm was for compromises by either side.

Naturally, attention has centred on the thirteen failures to reconcile the views of the two Houses because the fate of a government depended on the outcome. However, there are other types of deadlock which do have the same potential for the Council to hold the government to ransom. These are:

- (i) repeated rejection of a bill by the Council after persistent efforts to have it passed, including reference to Select Committees of Council of which there were ten between 1960-81.¹⁶
- (ii) withdrawal of a bill from consideration because government wearies of the effort to persuade the Council, even though it regards the proposed legislation as important.

- (iii) not introducing legislation into the Parliament because the government fears the Council will react adversely or take an anti-government attitude and so endanger other proposed legislation or even the Budget.¹⁷

Of these, the ones referred to in the above figures are for failed and lapsed conferences or rejected bills. The extent of situations in which (ii) and (iii) have arisen and forced governments to fail to fulfill their mandate is unknown because they are wholly subjective and known only to individuals at the time. Nonetheless, they were mentioned as relevant by the Premiers and others who gave evidence to the 1982 Royal Commission.¹⁸

The major issues as mentioned above have always been where the Conference has failed to agree and this has most often occurred over questions of supply. Since 1857, when the first such crisis arose, there have been some twenty-six occasions of this kind. The most serious being those that extended the discussions over a long period of time increasing the conflict and reducing the likelihood of a reconciliation. Three such situations are worthy of mention to illustrate the issue:

- (i) in 1891/2 when the government of P.O. Fysh was forced to resign;
- (ii) between 1899 and 1905 when bills for constitutional reform were continuously rejected by the Council, although it did not result in government resignation due to the strong will of the then Premier, Sir Edward Braddon; and
- (iii) in 1948 when the government of R. Cosgrove was forced to resign on the rejection of supply, although in fact the Council used supply to force the election after the Premier had been charged with bribery and corruption and subsequently discharged by a jury.¹⁹

In all cases the Council was exercising its constitutional rights and privileges in a way it saw as appropriate for the time. Yet it is hard to justify its actions on any of the grounds relating to hasty and ill-conceived actions of a popularly elected government or the will of the people. In each case it appears reasonable to accept that there was a clash of wills, a clash of styles and self-perceptions.

Constitutional Amendment

There have been thirty two attempts to amend the Tasmanian Constitution. Many of them were to limit or remove the powers of the Council. None of these have been successful; others for electoral changes or boundary changes have. The majority of those that were successful actually originated in the Legislative Council.

The Council has to agree to limit its own activities and while it has the self-perception of its role outlined in the preceding section this is unlikely. Four methods of resolving the issue of deadlocks, although obviously not the conflicting styles, have been suggested more often than others:

- (i) a suspensory veto, where a bill presented to the Council would become law after a specified period of time;
- (ii) dissolution of both Houses, where in the event of a deadlock, both have to go to the people for judgment; a variant of this is to dissolve the House of Assembly only on the grounds that to do otherwise would jeopardise the independence of the Legislative Council;
- (iii) a referendum; and
- (iv) a joint sitting of the two Houses.

All of these have their particular problems but the 1982 Royal Commission recommended two different procedures, one for general bills and the other for money and constitutional bills. In the former case, if the government considered it an important matter, it could prescribe the bill within three months of its rejection by the Council and if the Council still has not passed the bill within six months, the Governor, on the advice of the Government, has an option to:

- (i) have a referendum; or
- (ii) dissolve the Assembly.

In the case of money bills the recommendation was that there should be a six-week suspensory veto only. There was, however, a limitation in that such a veto would only apply

to what the Commission called 'an appropriation or supply bill confined to the ordinary services of government'²⁰. For Constitutional bills there was a much more complex system of checks which effectively constrained a Lower House from forcing through changes which would affect the Council without at least a two-thirds majority of both Houses or a referendum.

The question remains, however, whether, even if these or any other recommendations (to limit the powers of the Council) are accepted there is still a justification for retaining an Upper House at all. While the Tasmanian Legislative Council has remained relatively politically inviolate, other Upper Houses have not. So long as the independence of the Council and its role are perceived by candidates as a major reason for their candidacy this may not change. However, there is nothing in law to prevent the Council from having an wholly political membership.

There is also the crucial issue of uncertainty which even entrenched provisions to prevent deadlocks will not remove. Given the present generally unstable social and political environment, no government should reasonably be expected to have to answer to a House that is itself not answerable to the people. The 1982 Royal Commission argued that accountability of the Council would be enormously enhanced if it were to give up its power to reject money bills. Whether this is so or not has not been tested and it is this very lack of certainty that raises doubts about the matter. So long as the Council exists to meet situations as they occur to be dealt with by whatever practice is available to it at the time, it seems only equitable that they should either consent to be judged on that matter as a group by the people or forfeit the right to exist at all. Perhaps the questions of deadlock and supply which have caused so much concern should really have given way to the much more fundamental question of whether there is any justification at all for an Upper House.

In the final analysis there can be only one justification and that is that it is performing a different role from the Lower House and one which is supported by the people. In his evidence to the 1982 Royal Commission, Dr. Colin Hughes posed this question and identified the following differences:

- (i) its constituencies are smaller;
- (ii) its members serve longer terms;
- (iii) the terms of its members are staggered so that the Council itself is 'permanent' and 'continuing';
- (iv) some weightage is given to rural electors;
- (v) political parties play a very limited role in its elections and the great majority of its members sit without party labels.²¹

All of these characteristics underline the independence of the Council and certainly allow it to perform two important functions, which are stressed by its past and present supporters and by the 1982 Royal Commission. First, its capacity to examine both the merits of legislation, its contents and form, especially whether the drafting is adequate or the intentions of the bill properly met. Second, to provide an additional, and less party based, check on executive activity, particularly in a situation where most observers accept that Parliament is increasingly less able to control the Executive.

In respect of the first activity it is possible to argue that there are other and more appropriate methods to oversight legislation, such as an improved committee system. Indeed, the 1982 Royal Commission strongly recommend that such a system be implemented by the Legislative Council. Its arguments would presumably apply with equal, if not more, force to the House of Assembly and, if accepted, might preclude using them to support continuation of the Legislative Council for this purpose.

There appears to be little doubt that greater surveillance of Executive activities is required and, *prima facie*, an independent Council is a valuable asset for this purpose. Yet there is a lingering doubt about the credentials of Councillors to perform this task appropriately. While it is true that they eschew party labels, everyone agrees that they represent, and indeed were originally intended to represent, the more conservative and reactive elements of Tasmanian society. In his evidence to the Royal Commission, Emeritus Professor W. A. Townsley contrasted the attitudes of the two Houses, 'in one

the vision is somewhat distorted by the lens of party control, in the other it is rendered myopic by parochial influences'.²² This view is one which echoes earlier statements critical of the property-based interests of Councillors and its over-riding concern with legislation likely to be an increasing charge on property. With these considerations in mind there is some doubt about what is meant by independence in this context, since one of the traditional arguments against Upper Houses has been that they are bastions of privilege and the wealthy.

It is perhaps appropriate to conclude with the considered view of the 1982 Royal Commission which argued for a role for the Upper House of 'probing, testing, fact finding, questioning and the provision of information to the public at large'. This role is intended to assist in the development of public opinion and in education of the public, 'by bringing into the open many aspects of government and bureaucratic practice and policy that otherwise would pass unnoticed'.²³ They argued that it is the people bringing pressure to bear on governments that is the appropriate method of control of the Executive power, not Upper Houses blocking supply or rejecting bills. At the same time they recognised that this approach would require considerable concessions from both the Legislative Council and government to the way they currently saw their respective roles. For this reason, they did not go so far as to recommend it and it was left for both bodies to explore the possibilities of these new relationships. Perhaps such explorations should not be limited to the existing institutional framework but take into account other possible arrangements to accomplish the same vital functions.

Footnotes

1. Quoted in V. Korobacz 'The Legislative Council of Van Diemen's Land 1825-1856', Tasmanian Historical Research Association *Papers and Proceedings*, 21(1) March 1974, p. 8. The historical section of this essay owes much to this article, W.A. Townsley, *The Government of Tasmania*, Queensland University Press, St. Lucia 1976; W.A. Townsley *The Struggle for Self Government 1842-1856*, Government Printer, Hobart 1951 and Tasmania, Premiers and Chief Secretary's Office, *Sesquicentenary of the Separation of Van Diemen's Land from New South Wales 1825-1975*, Walch's Printery, Hobart 1975.
2. Quoted in Korobacz, *op. cit.*, p. 16.
3. *Ibid*, p. 10.
4. *Sesquicentenary op. cit.*, p. 15.
5. *Ibid*, p. 16.
6. *Ibid*.
7. *Ibid*.
8. Royal Commission on the *Constitution Act 1934 Tasmania 1982*, Appendix F. p. 114.
9. Townsley, *Government op. cit.* p. 84.
10. See Royal Commission *op. cit.* Appendix Q which shows that 11 of the 19 Councillors in 1982 either had been or still were in local government.
11. Royal Commission 1982 *op.cit. Report*, p. 37.
12. Tasmania, Legislative Council Select Committee on Legislative Council Boundaries, *Report*, Parliamentary Paper No. 45 of 1980, para 15.
13. Royal Commission 1982, *op. cit.* p. 36.
14. *Ibid* p. 17.
15. House of Assembly Standing Orders No. 416; Legislative Council Standing Orders, No. 306.
16. Royal Commission 1982 *op. cit.*, Appendix S (iii), p. 163.
17. Royal Commission 1982, *op. cit.*, *Report*, pp. 41-2.
18. Royal Commission 1982, *op. cit.*, Appendix W (i), pp. 177-188.
19. These examples are more fully described in Townsley, *Government op. cit.* pp. 86-93.
20. For a definition of what the Commission means by 'ordinary services' see *Report*, p. 52.
21. Royal Commission 1982, *op. cit. Report*, p. 38.
22. Quoted *Ibid*, p. 39.
23. *Ibid*, p. 70.

OMBUDSMAN

Following passage of the *Ombudsman Act 1978*, Tasmania's first Ombudsman Mr. C. R. Woodhouse, was appointed in June 1979 for a five-year term. The Act came into force on 10 September 1979.

Role and Powers

The Ombudsman is empowered by the *Ombudsman Act* 1978 and delegation from the Commonwealth Ombudsman to investigate complaints from citizens about administrative acts of State and Commonwealth Government departments, State statutory authorities, prescribed Commonwealth authorities and local government authorities. The Ombudsman, who is appointed by the Governor, is independent of any authority or Minister of the Government and is answerable to the Parliament of Tasmania. The Parliament may refer any matter within the Ombudsman's jurisdiction to him for investigation and report. The Ombudsman system provides a free, expeditious and informal means for the ventilation of grievances of citizens who feel aggrieved by administrative decisions or omissions. This involves carrying out impartial inquiries at a high level and making recommendations for the resolution of grievances where appropriate.

The Ombudsman's investigatory powers include those of a Board of Inquiry referred to in Section 14 of the *Evidence Act* 1910 including the power to enter and inspect any premises occupied or used by a public authority. Fines of up to \$1 000 are provided in cases where persons are found guilty of an offence under the *Ombudsman Act* by not co-operating with the Ombudsman.

Jurisdiction

A person may complain to the Ombudsman about any decision, act, omission, proposal or recommendation relating to a matter of administration by a Government department, a State or prescribed Commonwealth authority set up by Act of Parliament, or any local government authority or by their officers. The State Ombudsman's jurisdiction is limited by Parliament—it does not extend to: (i) action taken for the purpose of promotion of legislation; (ii) acts of counsel or legal advisers to the Crown or a public authority; (iii) judicial matters or acts; (iv) conditions of service determined under part V of the *Public Service Act*; (v) matters where a person has a right to review or legal remedy, unless the Ombudsman considers it is not reasonable for that person to resort to such action; (vi) acts of private persons, businesses or companies; or (vii) acts of the Auditor-General. Similar restrictions apply to the Ombudsman's delegated Commonwealth jurisdiction.

Complaints

Any person who considers that he has not been properly or fairly dealt with or who feels he has suffered an injustice as the result of any administrative act of a Government department or authority or any local government authority or their officers may take his grievance to the Ombudsman. The complaint should be made to him by the person directly affected by the administrative act complained of or, if the complainant so wishes, by a Member of Parliament on his behalf or, if the complainant is unable to act for himself, by some other person on his behalf. Corporate or unincorporate bodies may also make complaints.

Complaints may be brought to the notice of the Ombudsman by telephone, personal visit or by letter but it is generally preferable that a complaint be made in writing. There are no forms to fill in but a detailed account of the matter complained about with appropriate references to or copies of any correspondence with the Department, etc. involved, is desirable.

Grievances should be submitted without delay and within two years (State) or one year (Commonwealth) after the cause of the complaint has arisen. It is usually required that a person first endeavours to remedy his complaint by direct approach to the principal officer of the department, etc. concerned. If satisfaction is not obtained, he should proceed promptly to lodge his complaint with the Ombudsman.

Conduct of inquiries by the Ombudsman is essentially informal. He is not required to hold any formal hearings and he may regulate his procedures as he sees fit. All investigations are conducted in private; privacy of communication of complaints is extended to persons in the care or custody of government institutions. All complainants are informed of the final results of the Ombudsman's investigations.

ACTS OF STATE PARLIAMENT

Summary of State Acts, 1981

The examples below illustrate the interpretation of the notations used in the following list of Acts:

- (A 1952)—An Act to amend an Act of the same title passed in 1952.
- (A Audit Act 1952)—An Act to amend an Act of this title passed in 1952.
- (R 1952)—An Act to repeal an Act of the same title passed in 1952.
- (R Audit Act 1952)—An Act to repeal an Act of this title passed in 1952.
- (P 1952)—An Act to be incorporated and to be read as one with the Principal Act passed in 1952.
- (P Audit Act 1952)—An Act to be incorporated and to be read as one with the Principal Act of this title passed in 1952.
- (RS 1952)—An Act to repeal an Act of the same title passed in 1952 and to substitute new legislation.
- (RS Audit Act 1952)—An Act to repeal an Act of this title passed in 1952 and to substitute new legislation.

Where an Act amends an earlier Act or is to be incorporated and reads as one with the Principle Act, the year quoted in brackets (e.g. A 1952) refers to the year in which the Principal Act was passed; all subsequent amendments are inferred.

State Acts, 1981

Number

Short title and summary

- 1 Education (Teachers Federation) (A 1974) — provided for leave of absence of any teacher who holds an office with the Tasmanian Teachers Federation.
- 2 Constitution (A 1934) — provisions relating to contractors.
- 3 Mining (A 1929) — appointment and conditions of service of the Director of Mines.
- 4 Constitution (Doubts Removal) (P Constitution 1934) — validated the seat of Hobart.
- 5 Independent Order of Rechabites (Agreement) — related to the proceeds of the sale of certain land.
- 6 Dangerous Goods (A 1976) — provisions related to the Office of Chief Inspector of Explosives
- 7 Mines Inspection (A 1968) — provisions relating to the office of Chief Inspector of Mines.
- 8 Marine (A 1976) — allowances payable to master wardens.
- 9 Liquified Petroleum Gas (Subsidy) (A 1980) — extended provisions of the Act to certain commercial and industrial users.
- 10 Loan Fund Supply 1981—1982 — issue and application of Loan Funds.
- 11 Consolidated Revenue Fund Supply 1981-1982 — issue and application of funds out of Consolidated Revenue.
- 12 Fire Service (A 1979) — funding of fire services, increasing the membership of the Fire Service Advisory Council and providing for additional membership of Local Fire Committees and Sub-regional Fire Committees.
- 13 Traffic (Fire Service Funding) (A Traffic 1925) — payment by the Transport Commission to the Treasurer of annual amount required in connection with the new system of funding fire services.
- 14 Cascade Brewery Co. Ltd. (Shareholders Trust) — relating to shares and unclaimed dividends.
- 15 Building Societies (Guarantees) (A 1956) — relating to increasing the amount of guarantees the Treasurer may give in respect of loans made by an approved tender.
- 16 Ambulance (A 1977) — extended the operation of the Act.
- 17 Metropolitan Transport (A 1954) — makes the Trust subject to the control of the Minister.
- 18 Forestry (A 1920) — provisions relating to the establishment, development and management of a scheme for planting trees; and employment of staff.
- 19 Traffic (A 1925) — consequential amendments pursuant to the *Transport Act* 1981.
- 20 Transport (RS 1952) — constitution of a transport authority.
- 21 Hospitals (A 1918) — relates to the borrowing power of hospitals boards.
- 22 Potato Industry (A 1977) — constitution of the Authority.
- 23 Superannuation (A 1938) — provides for the payment of benefits to male contributors who retire at 63 years of age.
- 24 Retirement Benefits (A 1970) — provides for the payment of benefits to male contributors who retire at 63 years of age.
- 25 State Employees (Long-Service Leave) (A 1950) — extends period male employees who retire at 63 years of age are entitled to pro-rata payments.
- 26 National Companies and Securities Commission (State Provisions) — to provide for the operation of the National Companies and Securities Commission in the State.
- 27 Companies and Securities (Interpretation and Miscellaneous Provisions) (Application of Laws) — interpretation of provisions relating to corporations and the securities industry.
- 28 Companies (Acquisition of Shares) (Application of Laws) (A Companies Act 1962) — provisions relating to the acquisition of shares in companies incorporated in Tasmania, and to amend the *Companies Act* 1962.

- 29 Securities Industry (Application of Laws) — the securities industry in Tasmania.
- 30 Wrest Point Casino (Further Agreement) (A Wrest Point Casino Licence and Development Act 1968) — development of a convention centre complex, and relates to determinations of the Hobart City Council.
- 31 Electoral (A 1979) — extended provisions of previous Act to 31 December 1981.
- 32 Shop Trading Hours — regulated trading hours of certain retail shops.
- 33 United Milk Products Ltd. (Amalgamation) — provided for the amalgamation of certain northern milk companies.
- 34 Traffic (A 1925) — gave police officers the power to arrest for failure to provide name and address, and the suspension of drivers' licences as a result of delayed accumulated demerit points.
- 35 Northern Casino (A 1978) — tax payable by the casino.
- 36 Apple and Pear Marketing (A 1977) — constitution of the Authority.
- 37 Hospitals (A 1918) — provisions relating to control of personal property of in-patients, expenditure of boards and control of parking areas on hospital lands.
- 38 Industrial Relations (A 1975) — protection for liability for officers.
- 39 Acts Interpretation (A 1931) — provisions relating to the interpretation of Acts of Parliament.
- 40 Fisheries (Commonwealth-State Arrangements) (A Fisheries Act 1959) — provisions relating to the management and control of fisheries adjacent to Tasmania.
- 41 Workers' Compensation (A 1927) — provided protection to the Secretary from personal liability.
- 42 Industrial Safety, Health and Welfare (A 1977) — provided protection to officers against personal liability.
- 43 Tourism (A 1977) — provided for the appointment and conditions of the Director of Tourism and increased the maximum contingent liabilities that the Minister may incur.
- 44 Stamp Duties (A 1931) — exemptions from duty.
- 45 Industrial Relations (A 1975) — related to the publication of awards.
- 46 Land Titles (A 1980) — provision relating to caveats.
- 47 Trustee (A 1898) — definitions.
- 48 Local Government (A 1962) — excluded the Southern Regional Cemetery Trust from 486A of the Act relating to cemeteries.
- 49 Hobart Corporation (A 1963) — repealed Division III of Part V relating to cremation and burial.
- 50 Cremation (A 1934) — fees relating to cremations.
- 51 National Parks And Wildlife (A 1970) — provisions relating to evidence when contesting whether a place is or is not within a conservation area.
- 52 Evidence (A 1910) — related to the admissibility of business records in evidence, competence and compellability of spouses to give evidence in criminal proceedings and consequential amendments to the Criminal Code.
- 53 Police Regulation (A 1898) — prevented the use of chequered bands by other than police officers.
- 54 Education (A 1932) — exempted certain teachers from registration requirements.
- 55 Daylight Saving (A 1968) — extended the period of daylight saving.
- 56 Stock (A 1980) — extended the operation of the Act.
- 57 Consolidated Revenue Fund Supply (No. 2) — issue and application of funds out of Consolidated Revenue.
- 58 Gordon River Hydro-Electric Power Development (Referendum) — provided for a referendum of the electors of Tasmania on the question of which location was preferred for the construction of a hydro-electric scheme.
- 59 Consolidated Revenue Fund Supplementary Appropriation 1980-81 — issue and application of funds from Consolidated Revenue.
- 60 Petroleum Products Business Franchise Licences — provided for the issue of licences and prohibited the sale of certain petroleum products by anyone without a licence.
- 61 Records of Offences (Access) — conferred on persons a right to have access to their own records of offences.
- 62 Transport (A 1981) — established a trust fund and provided for the payment to the Treasurer of money received from registration and licence fees.
- 63 Land Tax (P Land and Income Taxation Act 1910) — fixed the scale of land tax for the financial year ending 30 June 1982.
- 64 Pay-Roll Tax (A 1971) — allowed greater deductions and rebate of pay-roll tax for small businesses.
- 65 Consolidated Revenue Fund Appropriation 1981-82 — issue and application of funds from Consolidated Revenue.
- 66 Tobacco Business Franchise Licences (A 1980) — increased the fees payable for licences.
- 67 Roads and Jetties (A 1935) — credits to the State Highway Trust Fund monthly sums on account of the amounts collected as licence fees under the *Petroleum Products Business Franchise Licences Act 1981*.
- 68 Motor Vehicles Taxation (RS Motor Vehicles Tax Act 1917) — provided for the levying, charging, assessment and payment of tax on motor vehicles and trailers.
- 69 Traffic (No. 3) (A 1925) — provided for the determination of gross vehicle mass or gross combination mass in respect of motor vehicles.

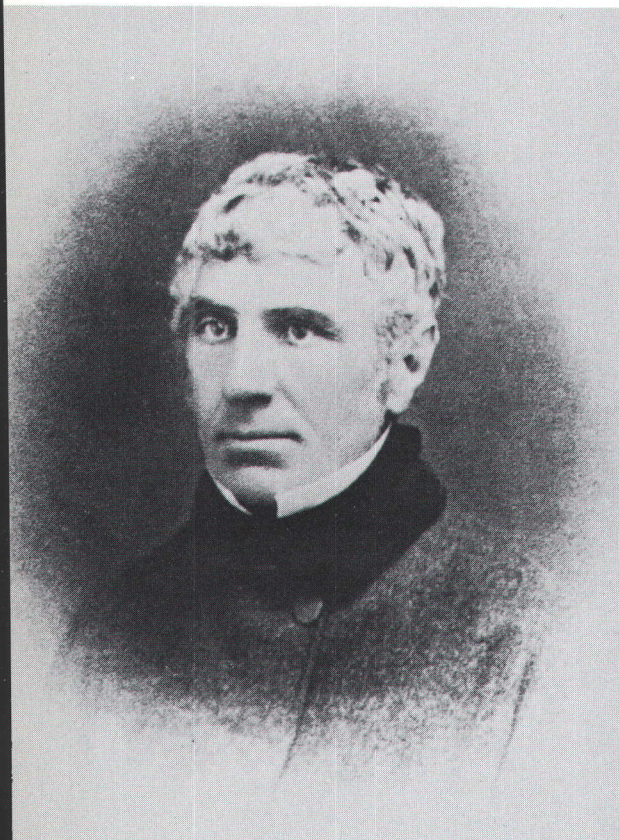


TASMANIAN PREMIERS

W. T. N. Champ (1.11.1856 - 26.2.1857)

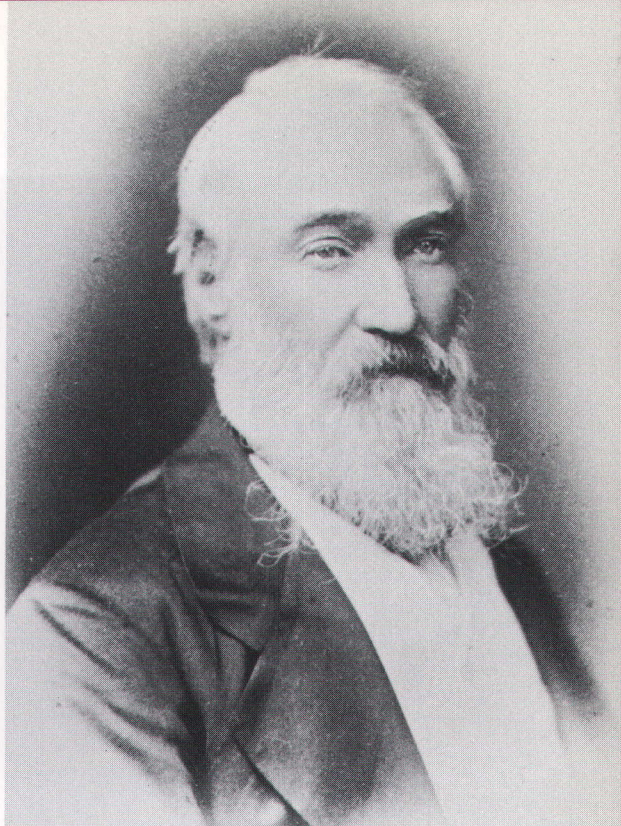
T. G. Gregson (26.2.1857 - 25.4.1857)

(Allport Library and Museum of Fine Arts, Hobart)



W. P. Weston (25.4.1857 - 12.5.1857 and 1.11.1860 - 2.8.1861)

F. Smith (12.5.1857 - 11.1.1860)

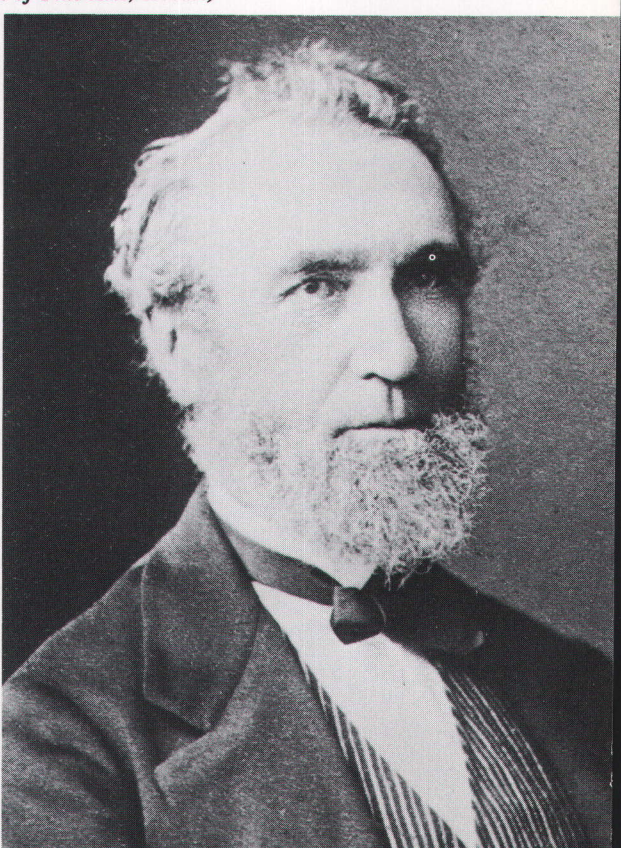


TASMANIAN PREMIERS

T. D. Chapman (2.8.1861 - 20.1.1863)

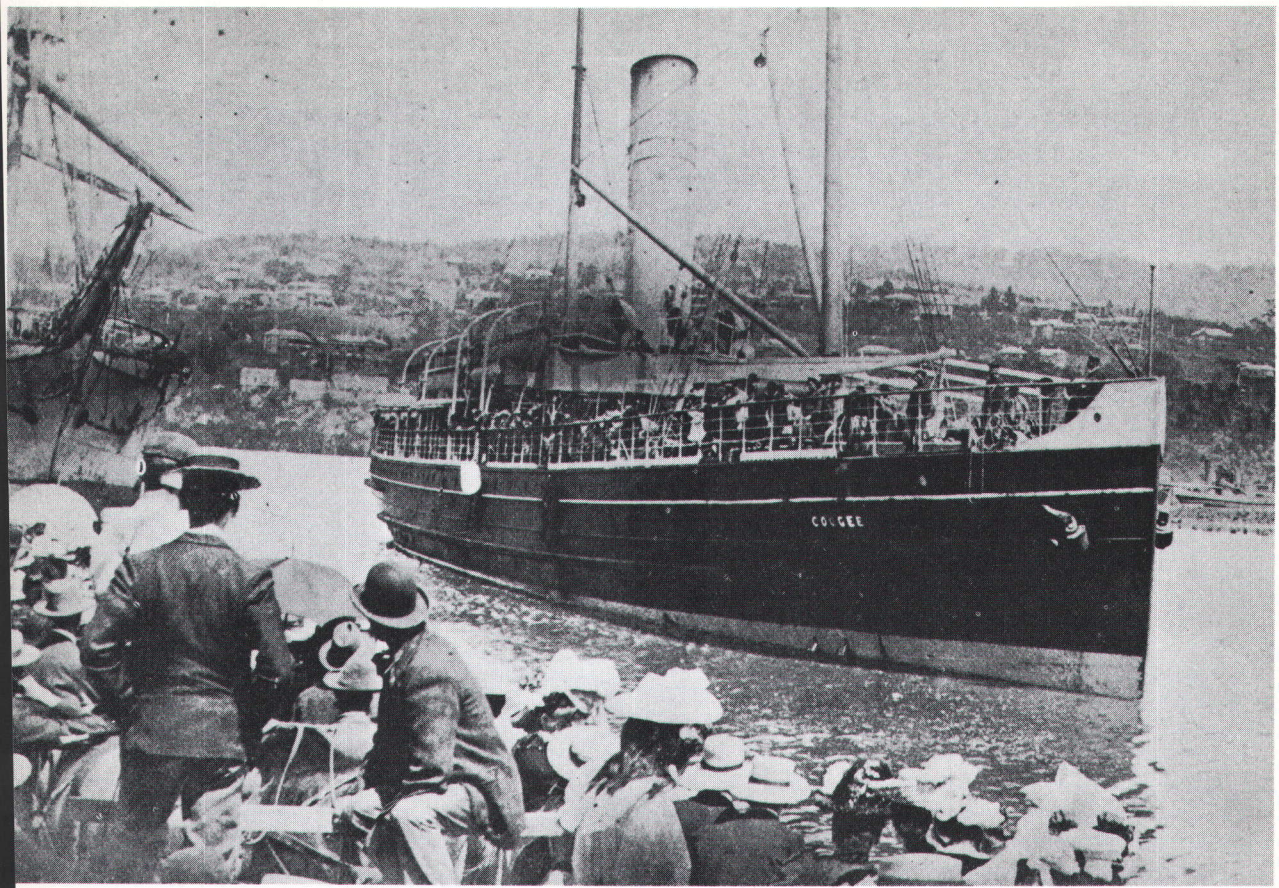
J. Whyte (20.1.1863 - 24.11.1866)

(Allport Library and Museum of Fine Arts, Hobart)



J. M. Wilson (4.8.1869 - 4.11.1872)

F. M. Innes (4.11.1872 - 4.8.1873)

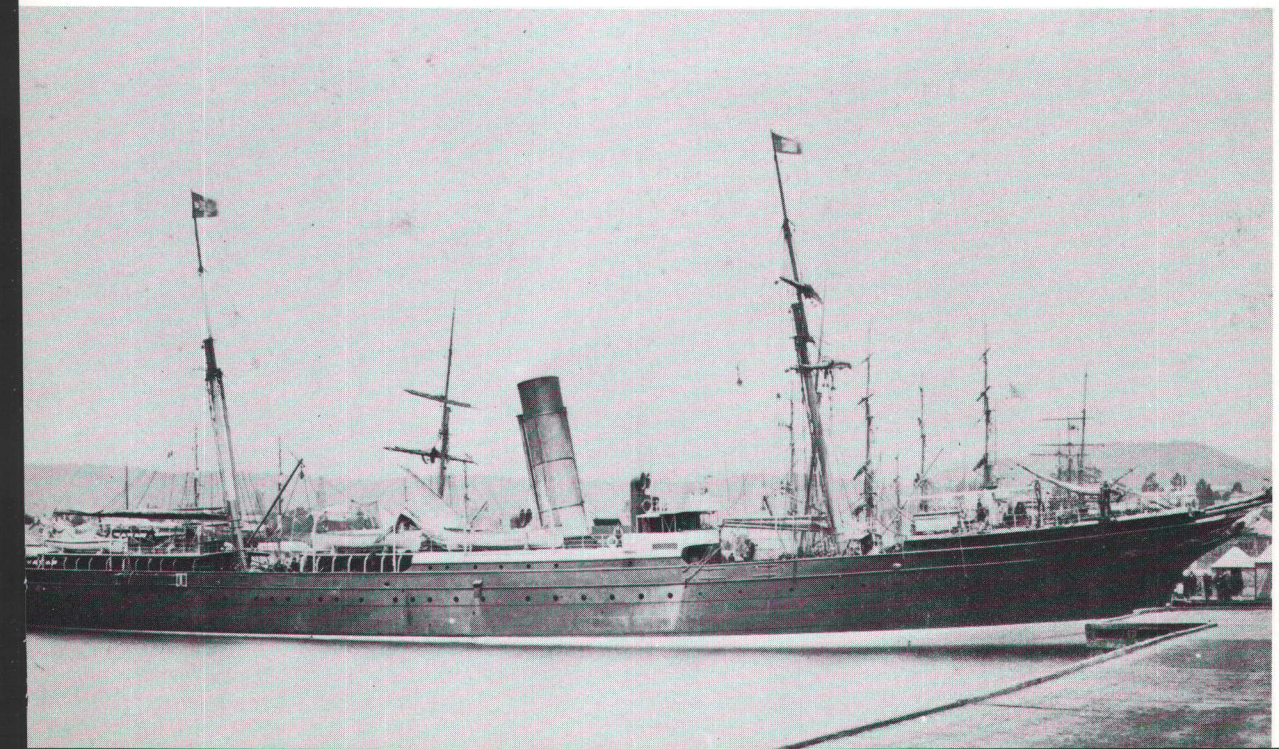


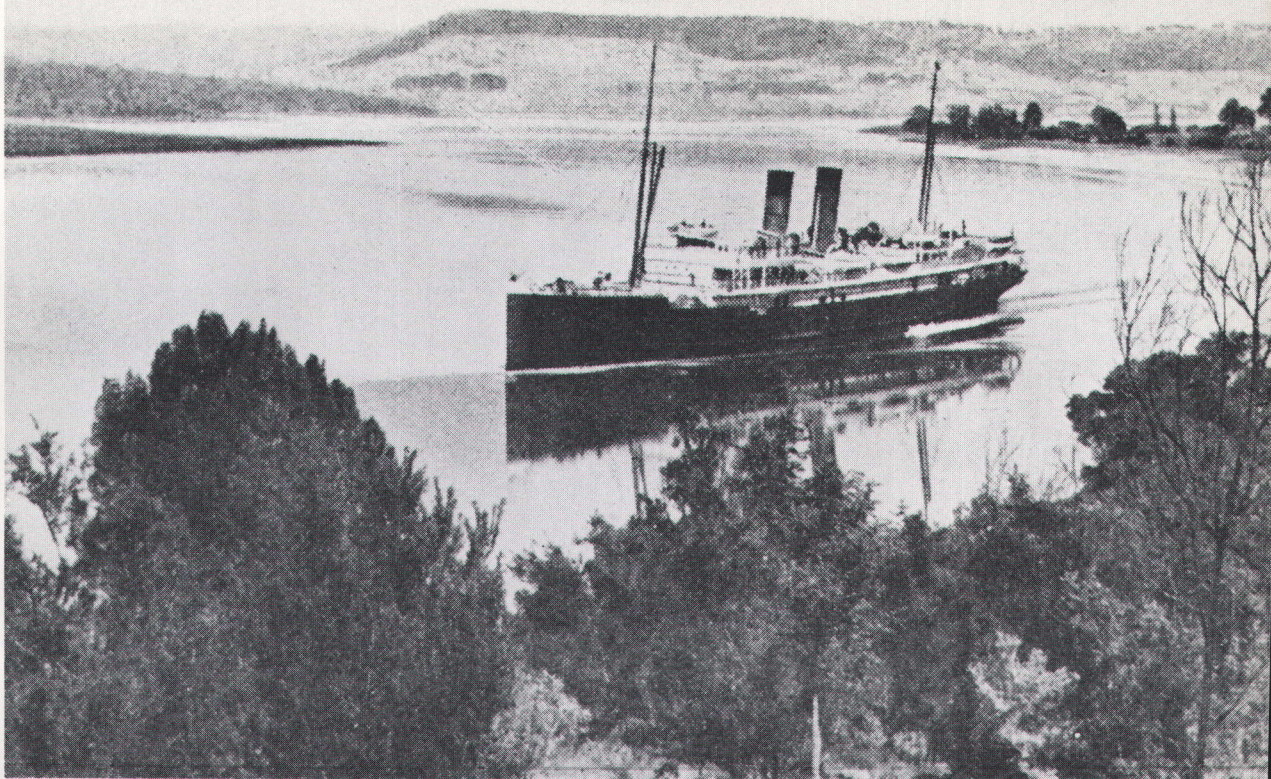
Coogee (762 tons) at Launceston

Built 1887. Christened Lancashire Witch. Acquired for the Melbourne/Geelong Bay trade but switched to the Bass Strait ferry service in 1890. Used as a minesweeper in W.W.I, dismantled in 1928.

Rotomahana (1727 tons) at Launceston

Built 1879 for Australia-New Zealand passenger trade. Was used on the Melbourne-Launceston trade from 1905 to 1920. Scrapped in 1925.
(Archives Office, Tasmania)





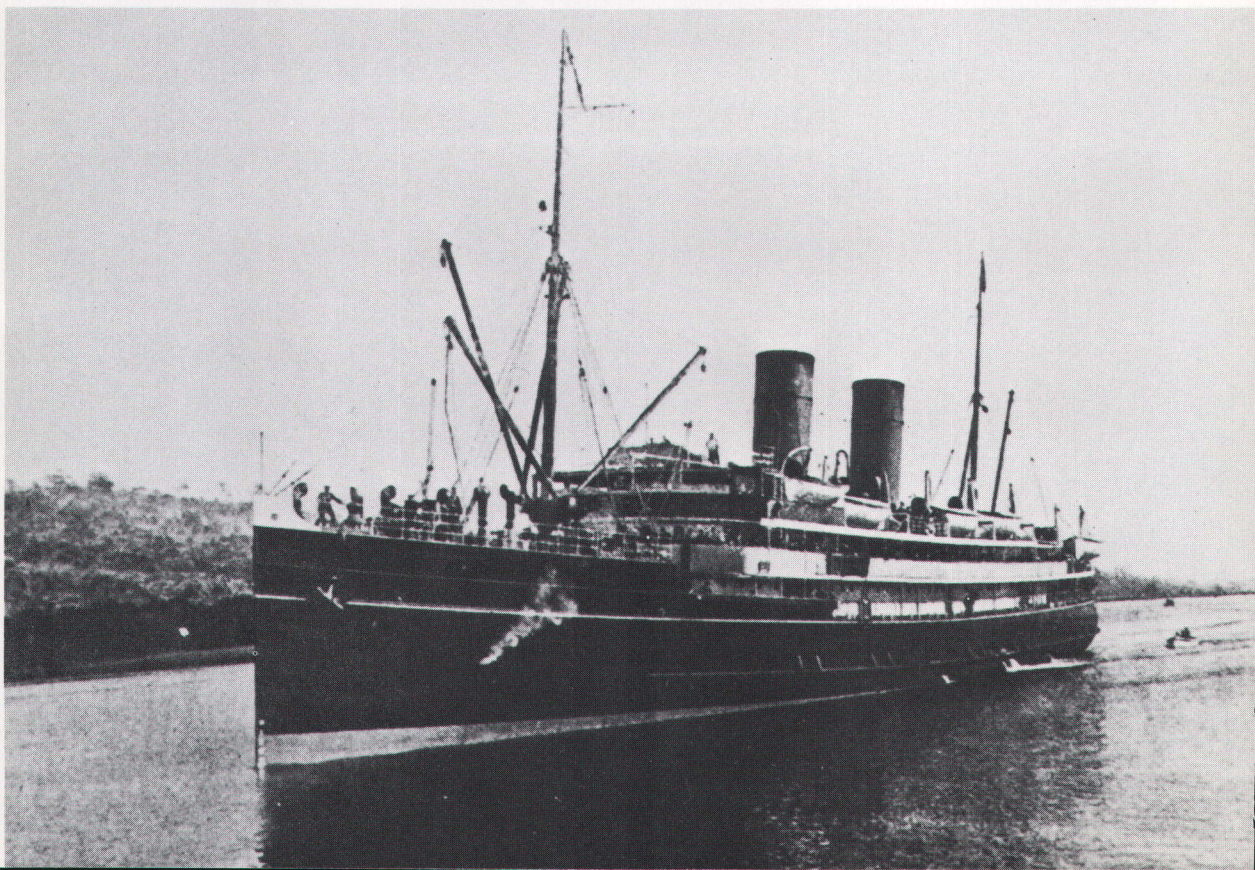
Loongana (2448 tons) on River Tamar

Built in 1904 for the Bass Strait trade. Was the first turbine driven passenger ship in Australian waters. Retired in 1935 after 31 years service.

Nairana (3042 tons) on River Tamar

Built 1917 and served in the British Navy before taking up the Melbourne-Launceston run in 1921. Transferred to the Melbourne-Burnie-Devonport trade in 1935. She made her final sailing in 1948.

(Archives Office, Tasmania)



- 70 Stamp Duties (No. 2) (A 1931) — increased certain rates of duty.
- 71 Loan Fund Appropriation 1981-82 — provided for the issue and application of money from the Loan Fund.
- 72 Retirement Benefits (No. 2) (A 1970) — provided for the payment of expenses incurred for actuarial services, extended Trusts powers of investment, protected Trust members and removed doubts over jurisdiction with respect to pension payments and other benefits.
- 73 Fire Service (No. 2) (A 1979) — provisions relating to the appointment of Regional Chief Officers.
- 74 Fire Service (No. 3) (A 1979) — provisions relating to contributions payable by insurance companies towards the operating costs of brigades.
- 75 Superannuation (No. 2) (A 1938) — provided for the payment of expenses incurred for actuarial services, protected Board members, and removed doubts over jurisdiction with respect to pension payments and other benefits.
- 76 Sewers and Drains (A 1954) — removed the right of electors of a municipality to demand a poll when the corporation of that municipality sets a separate local rate for sewerage works.
- 77 Local Government (No. 2) (A 1962) — removed the right of electors of a municipality to demand a poll when the corporation of that municipality sets a separate rate for sewerage works, provisions relating to and valuation as urban farm land, and controls for buildings, parking meters and metered parking space.
- 78 Hobart Stock Exchange (Repeal) (R Hobart Stock Exchange 1981).
- 79 Building Societies (A 1876) — empowered a society to enter into agreements with societies incorporated outside Tasmania.
- 80 Pensioners (Heating Allowances) (A 1971) — provisions relating to the eligibility of pensioners to be granted allowances.
- 81 Devonport (Fenton Street — Partial Closure) — extinguished rights of passage over a section of Fenton Street in Devonport.
- 82 Pharmacy (A 1908) — provided financing for the pre-registration education of graduates.
- 83 Parole (A 1975) — effected procedural and administrative improvements to the parole system.
- 84 Mental Health (A 1963) — provisions relating to persons detained in a special institution.
- 85 Apple Industry Assistance — provided for grants in respect of apples grown in Tasmania and exported overseas and for the reconstruction of the apple industry.
- 86 Police Offences (No. 2) (A 1935) — empowered police officers to arrest persons who fail to leave sports grounds in certain circumstances.
- 87 Police Offences (A 1935) — provisions relating to fees payable for permits for motor-vehicle races and to remove archery from Division III of Part II relating to firearm restrictions.
- 88 Vermin Destruction (A 1950) — conditions of service of members of the appeal board.
- 89 Local Government (No. 3) (A 1962) — reduced time for appeals pending approval of a building scheme.
- 90 Miners' Pensions (A 1956) — provided for deductions made from pensions in certain cases.
- 91 Southern Regional Cemetery — provided for the establishment of a trust and its powers and functions.

Further References

ABS Publication

Year Book, Australia (1301.0), normally annual.

Other Publications

Acts of the Parliament of Tasmania (annual, Tasmanian Government Printer, Hobart)

Tasmanian Statutes 1826-1959 (Consolidated reprint) (Tasmanian Government Printer, Hobart, 1960-1967)

The Tasmanian Almanac (published annually by Mercury-Walch, Hobart)

TOWNSLEY, W. A. *The Government of Tasmania* (University of Queensland Press, St. Lucia, 1976)

CHAPTER 4

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Chapter 4

PUBLIC FINANCE

FEDERAL AND STATE GOVERNMENT

Change in Relationship Since 1901

Prior to the establishment of the Commonwealth in 1901, the individual states exercised complete autonomy with respect to their raising of revenue and the manner in which this was spent. Due to developments since Federation, the states now have only limited ability to raise the money required for revenue and capital purposes. State revenue is now supplemented by substantial grants from the Federal Government and the raising of loans is under the control of the Australian Loan Council, a body set up under Federal legislation. The emergence of the Federal Government as the dominating influence in the financial transactions of the state governments can be traced to three events:

- (i) Under the Constitution the states surrendered the right to levy customs and excise duties, which passed exclusively to the Federal Government.
- (ii) Under the 1927 Financial Agreement, the Australian Loan Council became the borrowing agent for the states.
- (iii) During World War II, under the uniform tax scheme, the Federal Government became the sole authority levying taxes upon the income of persons and companies. (Introduction of new federal-state income tax sharing arrangements from 1977-78 has given each state the right to impose a surcharge or grant a rebate on personal income tax levied in its state.)

The result of these changed relationships can be summarised as follows: (i) the Federal Government, with two votes plus a casting vote as against one vote for each of the states, exercises a substantial degree of control over the Australian Loan Council and, consequently, over public investment in government securities; (ii) to carry out functions for which their revenue is inadequate, the states have become heavily dependent on the Federal Government for general and specific grants. The Federal Government is therefore placed in a position to exercise a substantial degree of control over the ordinary public expenditure of the states.

Principal Activities of the States

The Federal Constitution lists the matters over which the Federal Parliament has power to legislate. Some of those powers are given exclusively to the Federal Government (e.g. defence, customs and excise) but, in many matters, the Federal and State Governments have concurrent powers, Federal law prevailing where there is conflict. Matters other than those listed in the Constitution remain the concern of the states. Principal government activity at state level embraces education, health, and welfare services, the development of internal resources, land settlement, soil conservation, maintenance of law and order and the provision of public utility services such as roads, electricity, public transport and water supply. Such activities are undertaken either by state departments or by statutory and local government bodies created under state legislation. Apart from charges for services (where charges can be levied) the most obvious form of revenue for the discharge of these functions is state taxation but the Federal Government exercises a practical monopoly over the more lucrative tax sources (e.g. income tax, customs and excise, sales tax). A responsibility therefore rests on the Federal Government to supplement state revenues.

Federal Government Payments To or For Tasmania

Summary of Federal Government Payments

In the following sections the main forms of Federal Government assistance are described; the following table shows the total annual payments to Tasmania from the Federal Government's Consolidated Revenue Fund:

Federal Government Payments To or For Tasmania
(\$'000)

Particulars	1978-79	1979-80	1980-81
<i>General Purpose Funds</i>			
Personal income tax entitlement	240 737	272 696	298 602
Capital grants	33 496	29 085	30 539
Total	274 233	301 781	329 141
<i>Specific Purpose Payments</i>			
Revenue payments—			
Payments under financial agreement—			
Interest on State debt	534	534	534
Sinking fund on State debt	2 386	2 544	2 675
Universities	18 315	20 227	24 740
Colleges of advanced education	9 436	10 068	11 249
Technical and further education	1 673	2 005	2 407
Schools	13 290	14 617	17 565
Pre-schools and child care	1 658	1 773	1 871
Public hospitals (Medibank)	33 176	35 991	43 029
Community health	1 868	1 880	2 534
School dental scheme	1 226	1 882	1 688
Assistance for local government	5 741	7 095	9 624
Other	3 858	4 201	4 614
Total revenue payments	93 161	102 817	122 530
Capital payments—			
Universities	788	918	1 043
Colleges of advanced education	3 221	810	952
Technical training	394	3 400	4 772
Schools	4 385	4 280	3 988
Hospitals	4 959	5 160	3 400
Welfare housing	20 436	10 352	10 770
Pensioner housing	438	970	976
Other housing assistance	—	3 635	3 760
Roads	23 208	24 944	27 726
Tasman Bridge disaster	r— 725	—	—
Second Hobart Bridge	49	998	6 413
Assistance to primary industry	2 259	1 173	1 191
Other	r 3 566	r 3 576	4 860
Total capital payments	62 977	60 216	69 851
Total specific purpose payments	156 138	163 033	192 381
<i>General and Specific Purpose Payments</i>			
Total payments (a)	430 371	464 814	521 522
Percentage increase (b)	4.5	8.0	12.2

(a) This total cannot be identified as such in state accounts since part is taken into Consolidated Revenue Fund, part into Loan Fund, and the balance into Trust and Special Funds.

(b) Over previous year.

Financial Assistance Grants

Under the *Federal States Grants (Income Tax Reimbursement) Act* 1942 the states received general revenue grants for vacating the field of income tax. Various formulae were used to calculate each state's grant. From 1959 to 1975-76 the method was to annually increase the grant by multiplying the previous year's grant by: (i) the state's percentage increase in population; (ii) the percentage increase in average wages for Australia; and (iii) a betterment factor. The betterment factor was: 1.2 per cent from 1965-66 to 1970-71, 1.8 per cent from 1971-72 to 1975-76, and 3.0 per cent for subsequent years.

Personal Income Tax Sharing with the States

Commencing in 1976-77 financial assistance grants were replaced by personal income tax sharing arrangements between the Commonwealth and the states. This was a central element in the 'new federalism' policy of the Fraser Coalition Government. The income tax sharing between the Commonwealth and states was introduced in two stages. The first stage became operative in 1976-77; the second stage required further Commonwealth and state legislation. Federal legislation for Stage 2 was passed during 1977-78.

The principal elements of Stage 1 are:

- (i) The states receive a given percentage (39.87) of the net personal income tax collections for the previous year. This replaced the previous arrangement whereby the amount was 33.6 per cent of the collections for that year. The changes were enacted following the recommendations of the October 1977 Premiers' Conference.
- (ii) For the first four years of the scheme (1976-77 to 1979-80) the Commonwealth guaranteed that no state would receive less than it would have under the old financial assistance grant formula. In 1980-81 the states were guaranteed that each would receive no less in real terms than the amount received in 1979-80 as measured by the Consumer Price Index movement in the capital city of each state for the four quarters to March 1981.
- (iii) The total entitlement for all states is first decided. The amount is then divided between each of the states on the basis of each state's population and a relativity factor based on 1975-76 financial assistance grant receipts.
- (iv) The four less populous states can continue to apply for special grants in addition to their basic income tax sharing entitlements.
- (v) There will be periodic reviews of relativities between states.

In 1980-81 Tasmania received \$298 602 000.

Under Stage 2 each state may legislate to impose a surcharge on personal income tax in the state or to give a rebate of personal income tax payable under Commonwealth law. The state bears the cost of any such rebate. The Commonwealth will collect the surcharge or grant the rebate as the state's agent. In the case of a surcharge levied by one of the four less populous states the Commonwealth will make equalisation arrangements. These will ensure that the state will get the same relative advantage from the surcharge as a state with a broader personal income tax base.

Review of Tax Sharing Relations

After an extensive inquiry commencing in March 1979, the Commonwealth Grants Commission presented its *Report on State Tax Sharing Entitlements* 1981 on 9 June 1981. The Commission found that a change in the state factors which prescribe the per capita relativities between the States was desirable. The assessed factors derived by the Commission on the basis of its interpretation of the fiscal equalisation principles set down in Section 13(3) of the *States (Personal Income Tax Sharing) Act* 1976 are set down below together with those currently prescribed for use in the calculation of tax sharing grants:

State Factors

<i>State</i>	<i>Existing (a)</i>	<i>Assessed by Commission</i>
New South Wales	1.02740	1.048
Victoria	1.00000	1.000
Queensland	1.39085	1.487
South Australia	1.52676	1.319
Western Australia	1.66516	1.284
Tasmania	2.00188	1.549

(a) As contained in sub-section 8(3) of the *States (Tax Sharing and Health Grants) Act 1981*.

A Premiers' Conference was convened on 20 June 1981 to consider, inter alia, the Commonwealth Grants Commission's *Report on State Tax Sharing Entitlements 1981*. While there had not been adequate time since the Report became available for Governments to complete their studies of it, most States had comments and queries on particular aspects of the report.

A major concern was that the implementation of the assessed factors in 1981-82 would have resulted in large changes in the distribution of financial assistance among the States. On the basis of population projections then available it was estimated that implementation of the factors assessed by the Commonwealth Grants Commission would lead to the following changes in the then existing estimates of tax sharing grants payable in 1981-82:

<i>State</i>	<i>\$ million</i>
New South Wales	+116
Victoria	+ 55
Queensland	+128
South Australia	- 77
Western Australia	-160
Tasmania	- 64

Following discussion of the Commission's report it was decided that:

- (i) The Commission be asked to produce by early in 1982 a further report on its assessment of State relativities in the light of submissions to be put to it by the States and by the Commonwealth; and
- (ii) Commonwealth and State Treasury officers prepare an early report, for consideration by Governments, on the matters that the Commission should be asked to take into account in this further report.

Further, in view of the financial difficulties that would be created for South Australia, Western Australia and Tasmania if the distribution between the States of the tax sharing grants for 1981-82 were to be based on the factors assessed by the Commission, it was decided that there would be no change to the relativities contained in the *States (Tax Sharing and Health Grants) Act 1981* in respect of this year.

Special Grants (Section 96 of the Constitution)

Section 96 of the Constitution reads: 'During a period of ten years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, the Parliament may grant financial assistance to any state on such terms and conditions as the Parliament thinks fit.'

The Commonwealth Grants Commission was established in 1933 and consists of three members on a part-time basis assisted by a full-time staff. In its third report (1936) it fixed upon the principle of financial need, which was expressed in the following terms: 'Special grants are justified when a state through financial stress from any cause is unable efficiently to discharge its functions as a member of the federation and should be determined by the amount of help found necessary to make it possible for that state by reasonable effort to function at a standard not appreciably below that of other states'. In arriving at its recommendations, the Commission each year makes a detailed

comparison of the budget results of the claimant states with those of the non-claimant states.

Prior to the passage of the *Federal States Grants Act* 1959, the claimant states had been Tasmania, WA and SA. The new formula evolved under the *States Grants Act* 1959 had been devised partly in reaction to a claim by Victoria and Queensland to be also considered as claimant states; in effect, the new scale of increased grants under this legislation resulted in the number of claimant states falling to two, WA and Tasmania. The Grants Commission could then have used the accounts of the four non-claimant states to reach a basis for comparison; it finally decided to adopt a two-state standard, based on the budgets of NSW and Victoria. Recent developments have included: (i) the withdrawal of WA as a claimant state from 1968-69; (ii) the acceptance of SA as a claimant state from 1970-71; (iii) the acceptance of Queensland as a claimant state from 1971-72; (iv) the withdrawal of Tasmania as a claimant state from 1974-75; and (v) the withdrawal of SA as a claimant state from 1975-76.

On 11 June 1974 the Premier announced Tasmania's withdrawal as a claimant state for a Special Grant under Section 96 of the Commonwealth Constitution. The announcement was of historic significance for the State for two reasons:

- (i) In 1912-13 Tasmania first obtained a Special Grant under Section 96 of the Commonwealth Constitution and from that time until 1973-74 had received a special grant each year.
- (ii) In 1933 the Grants Commission was established to examine the claims of states requesting special grants to assist their revenues. From 1933 until 1973-74 Tasmania had had a continuous association with the Grants Commission and its determinations had considerably influenced the State Government's financial policies.

Tasmania's withdrawal from the Grants Commission's Special Grants procedures became operative for the 1974-75 financial year giving the State Treasurer greater freedom in planning the State's finances. However, some of the protection afforded by the special grant against any sudden unexpected deterioration of the State's financial position is lost.

The financial arrangement for the withdrawal was that \$15m would be added to the State's Financial Assistance Grant for 1974-75 and that the total receipt, including the \$15m, would become the base for calculating the 1975-76 Financial Assistance Grant. Also, as part of the withdrawal arrangement, Tasmania's 1972-73 and 1973-74 advance special grants were not subject to final adjustment.

For details of the method by which Special Financial Assistance Grants were paid to Tasmania, reference should be made to Year Books prior to the 1976 edition.

Payments Under the Financial Agreement (1927)

Under the Financial Agreement, which was entered into by the Federal Government and the states in 1927, the Federal Government contributes towards interest and sinking fund payments in respect of state debts existing at 30 June 1927, and towards sinking fund payments in respect of state debts incurred after that date for purposes other than the funding of revenue deficits. The Federal Government's contribution to Tasmania to assist with the payment of interest on State debt was set at an annual sum of \$533 718, to continue until 1985.

The sinking fund contributions made by the Federal Government under the Agreement in respect of state debts vary according to the date and nature of the borrowings. On state debts existing at 30 June 1927 the Federal Government is making sinking fund contributions at the rate of 0.125 per cent a year until 1985 and in respect of cash loans raised for the states since that date, the Federal Government makes sinking fund payments for 53 years at the annual rate of 0.25 per cent. Each state is obliged to make sinking fund payments for corresponding periods at the rate of 0.25 per cent per annum regardless of the date on which the debt was incurred. The only exception is in relation to debt incurred for the purpose of funding revenue deficits. In these instances,

the Federal Government makes no sinking fund contributions and the states are obliged to make annual contributions to the sinking fund of not less than four per cent. However, in respect of Treasury Bills issued to cover states' revenue deficits accruing between July 1927 and June 1935, special arrangements were made under which the Federal Government contributes 0.25 per cent per annum on the amount outstanding until June 1983.

Recent Federal Government sinking fund contributions in respect of the Tasmanian public debt are shown in the following table:

Federal Government Contributions to National Debt Sinking Fund: Tasmanian Debt (\$'000)

<i>Year</i>	<i>Amount</i>	<i>Year</i>	<i>Amount</i>
1975-76	2 100	1978-79	2 386
1976-77	2 069	1979-80	2 544
1977-78	2 225	1980-81	2 675

The acceptance of some Federal Government liability for interest and sinking fund payments on state debts was only one part of a more extensive agreement setting up an Australian Loan Council and a National Debt Sinking Fund. The raising of loan money for the states under the Agreement is described later in this chapter.

New Assistance for Debt Charges

At the 1970 February Premiers' Conference, the Federal Government announced it was prepared to take over state debt totalling \$1 000m during the five-year period 1970-71 to 1974-75. However, this would have necessitated amendments to the 1927 Financial Agreement and caused considerable delay. The Federal Government then proposed an alternative which involved grants to the states equal to interest on specific parcels of state debt. The distribution between the states was in proportion to Federal Government securities on issue on behalf of each state at 30 June 1978.

The 1927 Financial Agreement brought into effect by the *Financial Agreement Act* 1928 was amended during 1975-76 with retrospective effect from 30 June 1975. The total of \$1 000m of state debt was formally transferred to the Commonwealth.

Grants for Non-reproductive Capital Works

To assist the states in meeting their capital works programs since 1970-71, the Federal Government has provided annual grants for financing non-reproductive capital works. Total approved borrowing programs from 1974-75 to 1980-81 have been (in \$m): 1974-75, 1 087; 1975-76, 1 291; 1976-77, 1 356; 1977-78, 1 434; 1978-79, 1 434; 1979-80, 1 245; and 1980-81, 1 307. The proportion of the total states' capital works program provided by Federal Government grants in this period has been: 1974-75, 32.1; and 33.3 for 1975-76 to 1980-81 inclusive. For 1981-82 the proportion will again be 33.3 per cent.

Distribution of the grants was by agreement between the states or by the Federal Government if the states failed to reach agreement. Tasmania's share of the 1980-81 grant was \$30.5m which was credited to the State's Loan Fund.

The provision of these grants reduces the amount which the State needs to borrow in order to carry out its capital works program and eases the burden of debt charges (interest payments and sinking fund contributions) on the Consolidated Revenue Fund.

Federal Government Aid for Roads

Financial assistance to the states for roads during the triennium 1977-78 to 1979-80 was mainly provided under the *Federal State Grants (Roads) Act* 1977. The Act was based on the former Commonwealth Bureau of Roads' *Report on Roads in Australia* 1975. The Federal Government decided to make \$475m available to the states in 1977-78 and that the total grants in 1978-79 and 1979-80 would be equivalent in real terms to the 1977-78 grant. The legislation also established expenditure quotas for each state to be met from its own funds.

Over the five years 1980-81 to 1984-85, the Commonwealth is to provide \$3 650m to the States and the Northern Territory as grants for road construction and maintenance. Of this amount, \$662m was provided to the States in 1981-82. This represents an increase of 9.1 per cent over the amount provided in 1980-81 (\$607m), and is expected at least to maintain the 1980-81 level of Commonwealth financial assistance in real terms. The State's expenditure quotas are also to be increased similarly.

The Commonwealth also provides aid to the states for planning and research projects related to roads. For the three years 1977-78 to 1979-80 the assistance was paid under the *Transport Planning and Research (Financial Assistance) Act 1977*. For 1977-78 the Commonwealth met two-thirds of the expenditure on approved programs of projects and has met one half of such expenditure in subsequent years. Following the recent Review of Commonwealth Functions, Commonwealth assistance for this purpose was terminated at the end of 1980-81.

The following table shows amounts received by Tasmania for recent years for general road expenditure and for transport planning and research projects:

Federal Government Aid for Roads: Payments to Tasmania
(\$'000)

Year	Payments for roads (a)	Payments for transport planning and research (b)
1977-78	21 700	195
1978-79	23 208	173
1979-80	24 944	186
1980-81	27 726	168
1981-82	30 243	—
1982-83	32 406	—

(a) Grants paid under general roads Acts.

(b) Grants paid under the *Urban Public Transport (Research and Planning) Act 1974*, *Transport (Planning and Research) Act 1974* and the *Transport Planning and Research (Financial Assistance) Act 1977*.

Loan Council (Financial Agreement)

The original Financial Agreement was made on 12 December 1927, but Tasmania did not become a party to it until 1 July 1928. The basic intention of the agreement was a co-ordinated approach to the loan market, the establishment of sound sinking fund arrangements and the sharing of state debt charges with the Federal Government. The main provisions are summarised below:

- (i) The Federal Government assumed certain liabilities in respect of state debts (see previous section on interest and sinking fund payments made by the Federal Government in respect of Tasmanian State debt—'Payments under the Financial Agreement 1927').
- (ii) The Australian Loan Council was set up to co-ordinate the public borrowings of the Federal Government and the states. It consists of the Prime Minister (or his nominee) as chairman, and the state premiers (or their nominees). Each financial year the Federal Government and the states submit programs to the Loan Council setting out the amounts they desire to raise by loan during the next year. Revenue deficits to be funded are included in the borrowing programs but borrowing by the Federal Government for defence purposes is excluded from the terms of the agreement.

If the Loan Council decides that the total amount of the loan programs for the year cannot be borrowed at reasonable rates and conditions, it then decides the amount which shall be borrowed and may, by unanimous decision, allocate that amount between the Federal Government and the states. In default of a unanimous decision, the Federal Government is entitled to one-fifth of the total amount to be

borrowed and each state to a proportion of the remainder equal to the ratio of its net loan expenditure in the preceding five years to the net loan expenditure of all states during the same period.

Subject to the decisions of the Loan Council the Federal Government arranges all borrowings, including those for conversions, renewals and redemptions. However, the Federal Government or a state may borrow for 'temporary purposes' by way of overdraft or fixed deposit, subject to limits fixed by the Loan Council. In addition, the Federal Government may borrow within Australia, or a state within its own territory, from authorities, bodies, institutions, or from the public by counter sales of securities, subject to Loan Council approval. Federal Government securities are issued for money borrowed in this way and amounts so borrowed are treated as part of the borrowing program for the year.

- (iii) The agreement involved setting up a National Debt Commission to administer one consolidated sinking fund in respect of the debt of the Federal Government and the states. Sinking fund moneys are used to redeem unconverted securities at maturity and to re-purchase securities on the stock market.
- (iv) It was realised at the inception of the Loan Council that, in the interests of co-ordinated borrowing, the Council should be advised of borrowings of large amounts by semi-government authorities (such loan raisings do not form part of state or Federal Government debt and therefore are not within the scope of the original agreement). A set of rules evolved in 1936 is regarded as the 'Gentlemen's Agreement' and makes provision for the submission to the Council of annual loan programs in respect of larger semi-government and local government authorities (in conjunction with the loan programs of the governments concerned) and for the fixing of the terms of individual loans coming within the scope of the annual program. For 1981-82 larger authorities are those semi-government and local government authorities borrowing more than \$1.2m in a year. (In 1981-82 borrowings approved by the Loan Council for larger Tasmanian semi-government and local government authorities amounted to \$34 445 000.)

It should be emphasised that the Australian Loan Council does not itself raise money for Tasmanian semi-government and local government authorities; its concern is to assess the total impact of government borrowing for the year and then to fix ceilings for semi-government and local government authorities in the interests of a co-ordinated program.

The following table shows Loan Council borrowings undertaken on behalf of the State of Tasmania to finance new capital works:

Tasmania: New Cash Borrowings Authorised by Australian Loan Council (a)
(\$'000)

<i>Year</i>	<i>Amount</i>	<i>Year</i>	<i>Amount</i>
1976-77	63 802	1979-80	58 171
1977-78	66 992	1980-81	61 080
1978-79	66 992	1981-82	61 080

(a) For State works programs; amounts credited to State Loan Fund.

The previous table excludes allocations under the Federal Government and State Housing Agreements, which were also part of the Loan Council's program. The following table shows allocations to Tasmania for housing purposes:

**Tasmania: Allocations for Housing
(\$'000)**

<i>Year</i>	<i>Amount</i>	<i>Year</i>	<i>Amount</i>
1976-77	24 226	1979-80	10 352
1977-78	25 220	1980-81	10 770
1978-79	20 436	1981-82	8 964

STATE FINANCIAL TRANSACTIONS

Tasmanian Public Account

The State Public Account includes the Consolidated Revenue Fund, the Trust and Special Funds, and the Loan Fund. Revenue from State taxation, Federal Government financial assistance grants and other departmental sources is paid into the Consolidated Revenue Fund. Main expenditures from it are for education, health and hospitals, roads, law and order, public debt charges, and subsidies to State business undertakings. The Trust and Special Funds cover special transactions outside the ordinary operations of departmental expenditure, such as funds from the Federal Government for specific purposes and moneys held for expenditure by the State at some future time. The Loan Fund receives its funds from public borrowings and grants, and the main expenditure is on State public works and on advances to State business undertakings.

A summary of transactions on the Tasmanian Public Account is given in the following table:

**Public Account: Summary of Transactions, Tasmania
(\$'000)**

<i>Particulars</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Cash and investments at beginning of year	25 989	12 393	19 734	15 918
Receipts—				
Consolidated Revenue Fund	444 263	495 822	560 192	620 307
Borrowings for new capital purposes	66 992	66 992	58 171	61 080
Other Loan Fund receipts	52 223	56 873	58 677	54 751
Net increases, Trust and Special Funds	—2 908	1 816	1 566	—2 792
Total	560 570	621 503	678 606	733 346
Expenditure—				
Consolidated Revenue Fund	450 706	492 961	560 617	627 441
Loan Fund, public works and purposes	123 459	121 201	121 805	114 790
Discount	—	—	—	—
Total	574 165	614 162	682 422	742 231
Percentage increase	12.2	7.0	11.1	8.8
Cash and investments at end of year	12 393	19 734	15 918	13 090

The State Public Account is a complete record of the Government's operation of three specific funds, i.e. Consolidated Revenue, the Trust and Special Funds, and the Loan Fund. It is by no means a complete record of government activity, since statutory authorities and semi-government authorities such as the Hydro-Electric Commission, Transport Commission and Agricultural Bank carry on financial operations which are not recorded in the State Public Account. In a later section of this chapter under the heading 'Exclusions from Consolidated Revenue', the relationship between the finances of the

principal authorities and the Consolidated Revenue Fund is described; the general principle is that gross receipts and expenditure of the authorities are excluded from the Public Account.

In the following table are shown the balances credited to each fund constituting the Public Account and the form in which the balances are held:

Public Account: Summary of Balances at 30 June, Tasmania
(\$'000)

Year	Balance				Location			
	Accumulated Revenue Account	Loan Fund	Trust and Special Funds	Total	Cash in Treasury or bank	Advanced to departments	Govt. and other securities (a)	Total
1976	-9 400	17 308	21 280	29 189	4 696	1 423	23 069	29 189
1977	+1 583	2 926	21 479	25 989	1 655	1 411	22 923	25 989
1978	-6 443	265	18 571	12 393	-8 849	1 454	19 788	12 393
1979	-2 332	1 679	20 387	19 734	-11 153	1 435	29 452	19 734
1980	-6 057	21	21 954	15 918	-8 138	1 400	22 656	15 918
1981	-7 133	1 062	19 162	13 090	-7 637	1 360	19 367	13 090

(a) Includes fixed deposits.

In the previous table, 'Accumulated Revenue Account' is a suspense account recording accumulated surpluses and deficits in the Consolidated Revenue Fund, and also the funding of deficits. Details of the Account are as follows:

Accumulated Revenue Account: Summary of Transactions, Tasmania
(\$'000)

Year	Transactions			
	Opening balance	Budget result, Consolidated Revenue	Deficits charged to Loan Fund (a)	Closing balance
1975-76	-13 544	+ 4 144	—	- 9 400
1976-77	- 9 400	+ 1 583	+ 9 400	+ 1 583
1977-78	+ 1 583	- 6 443	- 1 583	- 6 443
1978-79	- 6 443	+ 2 861	+ 1 250	- 2 332
1979-80	- 2 332	- 3 725	—	- 6 057
1980-81	- 6 057	- 7 133	+ 6 057	- 7 133

(a) See later section in this chapter 'Deficit Funding'.

In the following section dealing with Consolidated Revenue, Treasury practice of eliminating special grant adjustments from Consolidated Revenue total receipts has been followed.

Consolidated Revenue Fund

General

The financial transactions of the State of Tasmania are recorded under: (i) Consolidated Revenue; (ii) Trust Funds; and (iii) Loan Fund.

Payments from Consolidated Revenue are made only on the basis of authority found in: (i) the annual Appropriation Act of Parliament; (ii) Acts of the Parliament made in previous years and under which certain annual payments are classified as 'reserved by law'; and (iii) the *Public Account Act 1957* (as amended in 1962) and the *Audit Act 1918*.

The third category of authority listed above is designed to give the Treasurer and the Government some flexibility in public expenditure since the *Appropriation Act* cannot be expected to anticipate, to the nearest dollar, the expenses that are likely to be incurred for each and every item. The relevant sections of the amended *Public Account Act* are

5A and 5B. These provide that, in relation to Consolidated Revenue, the Treasurer may authorise transfers between votes within certain sub-divisions of the appropriation and, on the authority of the Governor, supplement certain appropriations and provide funds to meet expenditure for which no other provision exists. Transfers, as described under 5A, are a matter for the Treasurer but additional expenditure, as described under 5B needs ratification by Parliament before the close of the following financial year. Regulations 20 and 21 of the second schedule of the *Audit Act* provide for expenditure by the Treasurer to meet emergencies for which no vote exists; the Governor must first authorise such expenditure and the Auditor-General investigate the circumstances before payment can be made.

Exclusions from Consolidated Revenue

It should be observed that the Consolidated Revenue Fund does not include all revenue and expenditure in respect of activities undertaken or authorised by the State Government. Some moneys are paid directly into State Trust Funds; e.g. Federal Government assistance for roads is paid into the State Highways Trust Fund and the various expenditures on roads are made directly from that Fund. The gross receipts and payments of a number of State business undertakings and State authorities are excluded from the Consolidated Revenue Fund, their relation to the Fund being as follows:

- (i) The *net* loss incurred by the Transport Commission each year is met from the Consolidated Revenue Fund. The Commission's net loss occurs principally in respect of government shipping services which it administers. The Commission's gross receipts and expenditure are excluded from the Fund.
- (ii) Omnibus services in Hobart, Launceston and Burnie are operated by the Metropolitan Transport Trust. The *net* annual loss of the authority is a charge against Consolidated Revenue. Annual payment of debt charges on Government advances is credited to the Fund.
- (iii) The gross receipts and expenditure of the Hydro-Electric Commission are excluded from the Consolidated Revenue Fund; however the annual payment of debt charges by the Commission is credited to the Fund. Net profit or loss on the Commission's activities is carried forward in the authority's own suspense account. From 1971-72 the Commission has been required to pay an annual contribution to Consolidated Revenue. The amount was five per cent of the total revenue derived from retail sales of electricity in the preceding year, until January 1977, when it was reduced to 2½ per cent and eventually eliminated from January 1978. However, the 5 per cent tax on revenue was re-introduced in January 1979.
- (iv) Also excluded from the Consolidated Revenue Fund are the gross receipts and payments of: regional water schemes, Government Printing Office, Government Insurance Office, Public Trustee, State housing authorities, closer settlement, rural credits and other activities of the Agricultural Bank, etc. In accordance with various acts, it is usual for the net profits or losses of the previous year to be paid to or from the Consolidated Revenue Fund for the current year. Debt charges on Government money loaned to the authorities are paid to Consolidated Revenue.

Consolidated Revenue Fund—Summary

The following table shows the transactions of the Tasmanian Consolidated Revenue Fund, the surplus or deficit, and the aggregate deficit at the end of each year.

**Consolidated Revenue Fund: Surpluses and Deficits, Tasmania
(\$'000)**

<i>Year</i>	<i>Revenue</i>	<i>Expenditure</i>	<i>Budget Result</i>	<i>Aggregate funded deficit at end of year</i>
1974-75	268 522	282 065	- 13 544	46 052
1875-76	(a)322 091	(a)317 947	(a)+ 4 144	41 908
1976-77	396 617	395 033	(b)+ 1 583	(b) 41 908
1977-78	444 263	450 706	- 6 443	48 351
1978-79	495 822	492 961	+ 2 861	45 490
1979-80	560 192	563 917	- 3 725	49 214
1980-81	620 307	627 441	- 7 133	56 348

(a) As reported by the State Treasurer, and may disagree slightly with figures used later in this chapter which have been adjusted for remissions of casino tax.

(b) Surplus in this year transferred to Loan Fund.

Deficit Funding

At 30 June 1981 the sum of \$56 348 000 had been charged against the Loan Fund as 'revenue deficits funded'; \$7 133 000 was carried as a negative balance in the Accumulated Revenue Account.

The next table shows the adjusted budget result for recent years and how the result was treated.

**Consolidated Revenue Fund: Adjusted Budget Result and Treatment, Tasmania
(\$'000)**

<i>Budget result</i>			<i>Budget result</i>		
<i>Year</i>	<i>Amount</i>	<i>Treatment</i>	<i>Year</i>	<i>Amount</i>	<i>Treatment</i>
1973-74	- 3 150	Funded	1977-78	- 6 443	Funded
1974-75	-13 544	Funded	1978-79	+ 2 861	Offset
1975-76	+ 4 144	Offset	1979-80	- 3 725	Funded
1976-77	+ 1 583	Transferred to Loan Fund	1980-81	- 7 133	Funded

Consolidated Revenue Fund—Receipts

The following table shows Tasmanian Consolidated Revenue Fund receipts for recent years:

**Consolidated Revenue Fund: Receipts, Tasmania
(\$'000)**

<i>Item</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Federal Government grants—			
Financial agreement	534	534	534
Income tax entitlement	240 737	272 696	298 602
Education	10 546	13 118	14 221
Health (a)	40 042	43 455	51 496
Social welfare	986	1 036	704
Local Government	5 741	7 095	9 624
Total	298 586	337 934	375 181
Debt charge recoveries (b)—			
Interest	50 117	52 893	55 697
Sinking fund	5 228	5 461	5 651
Total	55 345	58 354	61 348

continued next page



Maria Island

*(Tasmanian Government
Stills Photographic Section)*





Sandstone Cliffs, Maria Island

(Tasmanian Government Stills Photographic Section)



*Convict relicts and disused
cement silos, Maria Island*

Consolidated Revenue Fund: Receipts, Tasmania
 (\$'000)—*continued*

<i>Item</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
State taxation (c)	104 289	113 957	130 664
Victorian Lotteries Agreement	2 536	3 571	4 953
Territorial revenue—			
Forestry	6 047	9 260	11 164
Other property income, etc.	6 024	9 533	8 263
Total	12 071	18 792	19 428
Departmental revenue, fees, etc.—			
Education	354	474	433
Health	2 630	3 216	3 998
Law and order	4 567	4 740	5 410
Tourism	1 215	1 194	1 269
Other (d)	15 633	17 960	17 623
Total	24 399	27 584	28 733
Grand total	495 822	560 192	620 307
Percentage increase	11.6	13.0	10.7

(a) Includes receipts under the Medibank agreement: 1978-79, \$32 976 000; 1979-80, \$35 491 000; 1980-81, \$42 604 000.

(b) Mainly on advances made to semi-government authorities.

(c) See later section 'State Taxation'.

(d) Includes transfers from the Loan Fund and the State Highways Trust Fund relating to the Department of Main Roads and Construction of: 1978-79, \$7.83m; 1979-80, \$9.66m; 1980-81, \$10.96m.

The relative importance of the various components of the Consolidated Revenue Fund can be assessed by expressing them on a per capita basis using the State mean population for the relevant financial year.

Consolidated Revenue Fund: Receipts Per Head of Mean Population, Tasmania

<i>Item</i>	<i>1978-79</i> <i>(\$)</i>	<i>1979-80</i> <i>(\$)</i>	<i>1980-81</i>	
			<i>Amount (\$)</i>	<i>Per cent</i>
Federal Government grants	718.6	803.8	878.0	60.5
State taxation	251.0	271.1	305.8	21.1
Debt charge recoveries	133.2	138.8	143.6	9.9
Departmental revenue, fees, grants, etc.	58.7	65.6	67.2	4.6
Territorial revenue	29.1	44.7	45.5	3.1
Victorian Lotteries Agreement	6.1	8.5	11.6	0.8
Total	1 196.7	1 332.5	1 451.7	100.0

State Taxation

During 1980-81 the chief State taxes, in order of importance were: pay-roll tax; motor taxes; stamp duties (on cheques, legal documents, etc.); land tax; and liquor tax and licences. Pay-roll tax, which was handed over to the State by the Federal Government from the 1971-72 financial year, has now become by far the largest single source of State tax revenue.

In the following tables, the figures shown for total taxes paid to Consolidated Revenue do not agree with those published by the State Treasurer. Excluded from the tables are amounts received from the Victorian Government under the Victorian Lotteries Agreement while 'motor taxes' includes amounts not treated as taxes by the State Treasurer.

The following table gives a summary for a three-year period, of State taxation taken into the Consolidated Revenue Fund:

State Taxation Collections Paid into Consolidated Revenue, Tasmania

Tax or licence	1978-79	1979-80	1980-81	
			Amount	Per cent
	\$'000	\$'000	\$'000	
Pay-roll tax	40 656	45 870	52 056	39.8
Motor taxes (a)	25 100	25 677	29 313	22.4
Stamp duties (b)	16 285	19 024	21 004	16.1
Land tax	4 867	5 126	6 110	4.7
Liquor tax and licences	4 228	4 693	5 325	4.1
Deceased persons' estates duties	5 549	3 859	3 030	2.3
Racing taxes	3 253	3 237	4 977	3.8
Casino tax and licence fees	2 640	2 836	2 978	2.3
Hydro-Electric Commission statutory levy	1 401	3 237	3 705	2.8
Business franchise—tobacco	—	—	1 796	1.4
Soccer Football Pools tax	297	384	355	0.3
Other licences	13	15	g 15	—
Total (c)	104 289	113 957	130 664	100.0

(a) See following section 'Motor Taxes'.

(b) Excludes: (i) stamp duties on bookmakers' tickets (included in 'Racing taxes'); (ii) stamp duty on third party insurance (included in 'Motor taxes'); and (iii) stamp duty on motor vehicle registrations (included in 'Motor taxes').

(c) Excluded are the following amounts received from the Victorian Government under the Victorian Lotteries Agreement: 1977-78, \$1 696 000; 1978-79, \$2 536 000; 1979-80, \$3 570 867; 1980-81, \$4 953 000.

Motor Taxes: In the preceding table motor taxes are shown as \$29 313 000 for the year 1980-81. The next table shows how this figure can be reconciled with motor tax figures published by the State Treasurer:

Motor Taxes (a) Paid to Consolidated Revenue Fund, Tasmania 1980-81 (\$'000)

Item	Amount
Motor taxes (a)	29 313
Less Stamp duty on—Vehicle registration (b)	5 370
Third party insurance (b)	465
Traffic fees (c) paid to—Police Department	2 584
Consolidated Revenue Fund	2 525
'Motor tax' as published by State Treasurer	18 369

(a) See preceding table 'State Taxation Collections Paid into Consolidated Revenue'.

(b) Treated as 'stamp duties' tax items by the State Treasurer.

(c) Includes motor vehicle registration fees, drivers' licences, charges for number plates, transfer of ownership fees and learners' permits.

Not all State taxation is paid into the Consolidated Revenue Fund, as shown in the following table:

State Taxation Collections Paid to Special Funds, Tasmania (\$'000)

Particulars	1978-79	1979-80	1980-81
Motor taxation—			
Retained by Transport Commission	100	115	120
Paid to the State Highways Trust Fund	—	227	302
Racing taxation—			
Paid to racing clubs and Racing Commission	938	991	1 373
Insurance companies—			
Contributions to fire authorities (a)	4 078	r 4 258	—
Total	5 116	r 5 590	1 795

(a) As from 1 November 1979 all payments were made to the State Fire Commission.

The following table summarises total State taxation collections:

Total State Taxation Collections, Tasmania (a)
(\$'000)

Particulars	1978-79	1979-80	1980-81
Paid into—Consolidated Revenue	104 289	113 957	130 664
Special Funds	5 116	r 5 590	1 795
Adjustments (b)	— 220	— 75	+2 657
Total	109 185	r 119 473	135 116

(a) Taxation is described more fully in a subsequent section, 'Taxation in Tasmania'.

(b) An adjustment item is necessary to reconcile items referring to different accounting periods.

Debt Charge Recoveries

After Federal Government grants and State taxation, debt charge recoveries is the next largest receipt item in Consolidated Revenue. The next table shows details of the interest and sinking fund payments made by various authorities on advances which have been made to them by the State Government. These advances have been made primarily from State loan borrowings and the Government attempts to recover amounts roughly equal to its liability for debt charges.

Debt Charge Recoveries: Consolidated Revenue Fund, Tasmania
(\$'000)

Source of recovery	Interest			Sinking fund contributions		
	1978-79	1979-80	1980-81	1978-79	1979-80	1980-81
Agricultural Bank	1 459	1 658	1 862	—	—	—
Herd Improvement Board	33	31	49	4	—	5
Forestry Department	1 332	1 476	1 650	—	—	—
Government Printing Office	30	30	31	3	3	3
Housing Department	1 866	2 234	2 747	288	316	361
Hydro-Electric Commission	38 105	39 423	41 154	4 568	4 746	4 866
King Island Abattoirs Board	39	50	41	5	5	5
Loans to industry—						
Aluminium industry agreement	24	—	—	—	—	—
Iron ore (Savage River agreement)	144	133	121	—	—	—
Other	921	868	1 072	—	—	—
Metropolitan Transport Trust	316	303	337	40	40	40
Metropolitan Water Board	1 320	1 339	1 347	170	171	171
Rivers and Water Supply Commission ...	501	389	402	51	53	54
Tasmanian Grain Elevators Board	106	105	108	17	17	17
Tourism Development	420	471	465	—	—	—
Transport Commission	592	698	810	58	66	71
North-West Regional Water						
Authority	251	394	551	23	44	55
Marine Board of King Island	94	94	94	—	—	—
Midway Point Improvement Act						
1975	230	306	240	—	—	—
Public Bodies Assistance 1971	162	196	237	—	—	—
Other	r 2 172	r 2 694	2 380	1	—	4
Total	50 117	52 893	55 697	5 228	5 461	5 651

Consolidated Revenue Fund—Expenditure

In the following table a summary is given of the principal items of Consolidated Revenue Fund expenditure classified according to purpose:

Consolidated Revenue Fund: Expenditure by Purpose, Tasmania (a)
(£'000)

<i>Purpose</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
General administration n.e.c.	45 621	r 53 145	59 302
Law, order and public safety—			
Law courts and legal services	6 446	r 7 396	8 693
Correctional and custodial services	4 379	4 911	5 746
Police services	23 441	25 852	28 714
Fire protection	2 705	2 806	4 812
Road safety	407	464	503
Other	642	r 715	730
Total	38 019	r 42 143	49 198
Education—			
General administration, regulation and research .	11 992	13 422	13 589
Student transport	5 250	6 087	6 790
Primary and secondary	95 639	109 039	122 273
Technical	11 055	13 529	16 105
University	132	88	101
Other higher education	6 371	5 519	4 378
Special schools	2 607	3 091	3 342
Adult education	—	—	1 300
Other	14	51	88
Total	133 061	150 824	167 966
Health—			
General administration, regulation and research .	r 2 583	r 2 846	2 933
Mental health	13 539	15 561	17 321
Other hospital and clinical services	r 73 531	r 83 890	93 446
Preventative services	157	179	229
Maternal and infant health	1 166	1 360	1 477
Other health services	6 969	7 669	8 541
Ambulance services	1 774	1 925	2 603
Total	99 720	113 430	126 550
Social security and welfare—			
General administration, regulation and research .	1 143	1 325	1 529
Aged persons	329	413	404
Unemployed and sick persons and unemployment relief	1 319	411	411
Family and child care and assistance	3 459	3 835	4 421
Other	3 973	4 630	4 302
Total	10 223	10 614	11 067
Housing	4 680	6 480	7 109
Community and regional development	541	586	621
Protection of the environment	673	763	763
Other community amenities	—	—	250
Recreational and related cultural services—			
Cultural facilities	7 626	8 921	9 280
Support for creative and performing arts	70	77	85
Recreational facilities	3 172	3 806	3 870
Other	935	962	1 206
Total	11 804	13 766	14 440

continued next page

Consolidated Revenue Fund: Expenditure by Purpose, Tasmania (a)
 (\$'000)—*continued*

<i>Purpose</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Economic services—			
General administration, regulation and research .	4 140	r 4 090	4 013
Soil and water resources management	9 798	11 705	12 647
Forest resources management	6 186	6 597	9 714
Other services to agricultural and pastoral industries	11 967	13 173	13 032
Services to fisheries	—	1 680	1 776
Mining and services to mining	3 947	5 728	3 507
Manufacturing and services to manufacturing	1 153	3 399	2 291
Electricity supply services	214	309	471
Water supply services	2 488	3 159	3 282
Transport and communication—			
Roads and ancillary services	16 781	17 961	20 246
Sea transport	381	446	455
Urban bus services	6 520	7 212	8 547
Other	3 129	3 580	4 383
Other	6 721	r 8 261	8 925
Total	73 427	r 87 302	93 289
Other (including debt charges)	75 193	r 84 865	96 887
Total	492 961	r 563 917	627 441
Percentage increase	r 9.4	r 14.4	11.3

(a) Based on Australian purpose classification developed for analysis of government sector accounts; not strictly comparable with functional classifications published in Year Books prior to the 1975 edition.

Public Debt Charges

A significant item of expenditure is public debt charges, but a high proportion is recovered from semi-government authorities. The next table shows the net burden on Consolidated Revenue Fund of debt charges:

Public Debt Charges: Net Burden on Consolidated Revenue, Tasmania
 (\$'000)

<i>Particulars</i>	<i>Interest</i>			<i>Sinking fund contribution</i>		
	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Expenditure from Consolidated Revenue	(a) 69 344	(a) 74 276	(a) 87 665	(b) 8 224	(b) 8 903	(b) 9 466
Recovered from semi-government bodies, etc.	50 117	52 893	55 697	5 228	5 461	5 651
Net burden on Consolidated Revenue (c)	19 227	21 383	31 968	2 996	3 442	3 815

(a) Includes loan management charges.

(b) Contribution payable under the Financial Agreement to the National Debt Sinking Fund.

(c) In respect of non-revenue producing assets such as schools, roads, etc.

Government Transport Services

Unlike the Consolidated Revenue Funds of some Australian states, the Tasmanian Fund excludes the *gross* receipts and expenditure of State business undertakings such as shipping and bus services. The principal charge in 1980-81 under this item was in respect of the *net* loss incurred by the Transport Commission during 1979-80 (\$4 337 855). Another major item was a contribution of \$8 390 000 to the Metropolitan Transport Trust which experienced a net trading loss of \$8 184 982 in 1980-81.

Roads and Bridges

The chief expenditure under this item in 1980-81 was a transfer of \$18 368 681 to the State Highways Trust Fund, representing revenue received from motor tax and public vehicles fees. Grants totalling \$3 401 000 were paid from Consolidated Revenue Fund to the Transport Commission to cover the cost of vehicle registration and traffic control.

State Trust and Special Funds

State revenues are payable to Consolidated Revenue with the exception of certain revenues which have been set aside by acts of Parliament for specific purposes and which are payable into special funds or accounts at the State Treasury. The volume of these transactions is high, \$413 141 155 being received in 1980-81, \$415 932 951 being expended and the balance in the funds changing from \$21 953 555 (1 July 1980) to \$19 161 759 (30 June 1981).

It should be noted that many accounts in the Trust and Special Funds indicate Treasury transactions which merely reiterate those recorded under Consolidated Revenue and Loan Funds; the following examples are given:

State Trust and Special Funds: Selected Accounts, Tasmania, 1980-81
(\$'000)

<i>Account</i>	<i>Receipts</i>	<i>Expenditure</i>
Income Tax Deductions Suspense Account (a)	67 961	67 961
Hydro-Electric Commission London Suspense Account (b)	485	485

(a) Wages and salaries included under Consolidated Revenue and Loan Fund expenditure are shown at gross value; however, the deductions applicable to wage and salary earners on Tasmanian Government pay-rolls are passed, via this account to the Federal Government.

(b) The Treasury acts as agent for meeting overseas liabilities incurred by the Hydro-Electric Commission; these liabilities, mainly incurred in the acquisition of plant and equipment, are largely accounted for in Loan Fund expenditure.

Some accounts are concerned with government activities financed by the Federal Government, the State acting as trustee or agent in the transactions; examples follow:

State Trust and Special Funds: Selected Federal Accounts, Tasmania, 1980-81
(\$'000)

<i>Account</i>	<i>Receipts</i>	<i>Expenditure</i>
Tasmanian University (Commonwealth Grants) Account (a)	25 630	25 630
Recurrent Grants to Non-Government Schools Account (b)	6 819	6 819

(a) Treasury passes Federal Government grants to University of Tasmania.

(b) Treasury passes Federal Government grants to non-government schools.

In the case of some accounts, there is provision for crediting the Trust and Special Funds with contributions from Consolidated Revenue, an important example being the State Highways Trust Fund:

State Trust and Special Funds: State Highways Trust Fund, Tasmania, 1980-81
(\$'000)

<i>Item</i>	<i>Receipts</i>	<i>Expenditure</i>
Federal Government contribution	27 726	—
Grants from Consolidated Revenue	18 369	—
Roads, bridges, jetties, ferries and planning	1 380	48 468
Self-balancing entries	8 965	8 589
Fund entries	56 440	57 056

The Forestry Fund Account records transactions under legislation requiring revenue from forestry to be paid to Consolidated Revenue, and for Consolidated Revenue to expend an equal amount on forestry in the following year:

State Trust and Special Funds: Forestry Fund Account, Tasmania, 1980-81
(\$'000)

<i>Item</i>	<i>Receipts</i>	<i>Expenditure</i>
Grants from Consolidated Revenue (a)	9 260	—
Expenditure on forestry	—	9 288
Reimbursement, Softwood Forestry Agreement	28	—
Self-balancing entries	1 319	1 319
Fund entries	10 607	10 607

(a) Consolidated Revenue recorded forestry receipts of \$9 259 984 in 1979-80; this sum therefore became the 1980-81 contribution from Consolidated Revenue.

Some of the funds held in trust are not owned by the State Government, e.g. St John's Park Inmates Trust Account. Other funds are held on behalf of semi-government authorities, e.g. the Agricultural Bank.

State Loan Fund

Expenditure from the Loan Fund is devoted to two main purposes: (i) the making of advances to State semi-government authorities; and (ii) the carrying out of the State's own works program. Such funds, whether lent to other authorities for their works programs or spent directly by the State, result in the creation of new capital assets, a large proportion of which are revenue earning and therefore capable of reimbursing the State for the debt charges which it has incurred. (An earlier section on Consolidated Revenue expenditure shows the gross and net expenditure on annual debt charges.) In addition, conversion of existing loans is effected from the Loan Fund, but the amounts involved have been excluded from the next two tables as these transactions only alter the rates, sources or terms of existing public debt. Details of these debt servicing transactions are contained in a later table, 'Net Loan Fund Expenditure—Reconciliation'.

In addition to money from loan raisings, the Loan Fund may record other receipts such as the repayment of advances which had been made from the Fund to some Government authorities and community organisations, and contributions to capital works by the Federal Government.

Receipts into the Loan Fund are shown in the following table:

State Loan Fund: Receipts, Tasmania
(\$'000)

<i>Particulars</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Loans raised for new capital purposes	66 992	58 171	61 080
Loans raised for redemption and conversion (a)	80 454	62 489	189 048
Non-specific grants from Federal Government	33 496	29 085	30 539
Total	180 942	149 745	280 667
Specific grants from Federal Government—			
Education	4 107	7 180	8 160
Health and mental health	6 355	6 308	5 028
Urban public transport	869	1 075	1 178
Other	42	435	1 629
Total	11 372	14 999	15 994

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State Loan Fund: Receipts, Tasmania
(\$'000)—continued

<i>Particulars</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Payments from State sources (b)			
State Sinking Fund—Waste and Crown Land			
Account	—	1 477	—
Apple and Pear Marketing Act 1977	—	1 000	200
Industrial Development Act	1 128	1 492	1 664
Aluminium Industry Act	1 500	—	—
Transport Act	466	72	76
State Advances Act	1 159	1 172	1 266
Homes Act	69	81	90
Tourist accommodation and facilities loans	299	702	376
Sale of Government properties	5 117	5 914	450
Other	2 267	2 683	4 095
Total	12 005	14 593	8 217
Total Loan Fund receipts	204 319	179 337	304 878

(a) For the redemption and conversion of existing loans.

(b) Payments and repayments under provisions of various State Acts.

The following table shows annual gross and net loan expenditure. The net loan expenditure for 1980-81 (\$91.8m) was 0.7 per cent less than for 1979-80.

Loan Fund: Gross and Net Loan Expenditure, Tasmania
(\$'000)

<i>Year</i>	<i>Loan expenditure</i>		<i>Year</i>	<i>Loan expenditure</i>	
	<i>Gross</i>	<i>Net</i>		<i>Gross</i>	<i>Net</i>
1975-76	98 895	81 369	1978-79	122 544	99 167
1976-77	126 316	110 178	1979-80	121 979	92 387
1977-78	123 647	104 920	1980-81	116 005	91 793

Traditionally, loan expenditure has been recorded on both gross and net bases. The annual net loan expenditure is equal to the disbursement of borrowings during the year for new capital purposes (as distinct from borrowings for the conversion of existing debt), plus capital contributions by the Federal Government, augmented or diminished by the net movement in the Loan Fund balance. The following table shows the calculation of net loan expenditure from two viewpoints: (i) as a residue from gross loan expenditure; and (ii) as the algebraic sum of new loan raisings for new capital purposes, the net movement in the Loan Fund balance and discount and capital appreciation expenses.

State Loan Fund: Calculation of Net Loan Expenditure, Tasmania
(\$'000)

<i>Particulars</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
(i) Gross loan expenditure	122 544	121 979	116 005
Less Repayments	12 005	14 593	8 217
Less Federal Government specific grants	11 372	14 999	15 994
Net loan expenditure	99 167	92 387	91 793
(ii) Gross borrowings for new capital purposes	66 992	58 171	61 080
Federal Government non-specific grant	33 496	29 085	30 539
Movement in Loan Fund balance (a)	-1 414	+1 658	-1 041
Transfer from Consolidated Revenue Fund	—	3 300	—
Transfer from Accumulated Revenue Account ..	—	—	—
Other (b)	93	174	1 215
Net loan expenditure	99 167	92 387	91 793

(a) Negative sign (—) indicates an increase from opening to closing balance, plus sign (+) indicates a decrease.

(b) Discount on borrowings for conversion and re-financing purposes and capital appreciation items.

The next table shows Loan Fund payments classified according to purpose:

Loan Fund Payments Classified by Purpose, Tasmania (a)
(\$'000)

Purpose	1978-79	1979-80	1980-81
General administration, n.e.c.	13 727	11 367	12 347
Law, order and public safety—			
Law courts and legal services	2 317	1 390	328
Correctional and custodial services	276	1 156	135
Police services	1 125	1 283	1 185
Fire protection services	171	150	—
Other	78	61	187
Total	3 968	4 040	1 835
Education—			
General administration, regulation and research ..	8 128	7 959	5 795
Primary, pre-school and secondary	10 767	9 898	8 872
Technical	4 009	7 399	8 036
Adult education	49	—	—
Special schools	234	60	—
University education	—	—	500
Total	23 187	25 317	23 202
Health—			
Mental health	440	940	1 007
Other hospital and clinical services	18 117	16 834	12 007
Ambulance services	140	27	25
Total	18 696	17 801	13 040
Social security and welfare—			
Aged persons	101	281	256
Family and child care and assistance	191	252	181
Total	292	533	437
Housing and home finance services	9 459	11 200	9 900
Recreation and related cultural services—			
Cultural facilities	1 219	323	139
Recreational facilities	4 110	4 389	3 893
Total	5 328	4 712	4 032
Economic services—			
Soil and water resource management	980	500	500
Forest resources management	10 503	11 456	10 162
Services to agricultural, pastoral and fishing industries	4 265	4 393	4 049
Mining and services to mining	200	576	761
Manufacturing and services to manufacturing	3 993	9 446	7 396
Electricity supply	16 650	12 675	11 300
Water supply services	2 491	1 230	2 148
Transport and communication—			
Road and ancillary systems	4 873	4 678	4 218
Rail transport	1 201	640	501
Sea transport	14	—	37
Urban transport	869	1 075	1 178
Other	504	14	296
Total	46 543	46 685	42 547

continued next page

Loan Fund Payments Classified by Purpose, Tasmania (a)
(\$'000)—*continued*

<i>Purpose</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Other	—	150	1 394
Deficit on Consolidated Revenue Fund	1 250	—	6 057
Sinking fund and redemption (incl. conversions)	80 454	62 489	189 048
Total payments from Loan Fund	202 905	184 295	303 839

(a) Based on Australian purpose classification developed for analysis of government sector accounts; not strictly comparable with functional classification published in Year Books prior to the 1975 edition.

The following table shows how a reconciliation may be obtained between total Loan Fund payments in the previous table and net Loan Fund expenditure.

Net Loan Fund Expenditure: Reconciliation, Tasmania
(\$'000)

<i>Particulars</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Total payments from Loan Fund	202 905	184 295	303 839
Less Debt service transactions—			
Conversion (Australia)	79 401	46 921	97 241
Conversion (State Savings Bank Agreement)	960	960	960
Redemption from new cash borrowing	93	14 608	90 847
Loan Fund expenditure for new capital purposes	122 451	121 805	114 790
Plus Capital appreciation on special bonds	93	36	—
Plus Discount on borrowings for conversion and re-financing purposes	—	138	1 215
Gross Loan Fund expenditure	122 544	121 979	116 005
Less Total repayments to Loan Fund	23 377	29 592	24 212
Net Loan Fund expenditure (a)	99 167	92 387	91 793

(a) As specified in the Treasurer's Statement.

The *Public Account Act* 1962 has, amongst other things, the following provisions relating to the Loan Fund: (i) the Governor, on Treasury advice, may make transfers between block votes as long as the total authorised amount is not exceeded; (ii) a sum of up to \$400 000 may be spent for purposes not previously authorised; (iii) for purposes previously authorised, an additional sum of up to \$1m may be spent; (iv) in instances of expenditure outside the provisions of a specific Loan Fund Appropriation Act, the ratification of such action must be sought from Parliament before the close of the following financial year. The Act also provides for the unexpended balances of votes at the close of the financial year to lapse.

State Public Debt

Prior to 1 July 1975, the State public debt was calculated on two bases: (i) with overseas debt calculated at 'mint par of exchange' i.e. at the exchange rates prevailing on 1 July 1927; and (ii) with overseas debt calculated at current rates of exchange. 'Mint par debt' was the official debt for the purpose of determining sinking fund contributions payable under the Financial Agreement, 1927. This Agreement was amended at the end

of June 1975 and a new formula was applied for determining sinking fund contributions. 'Mint par debt' is no longer used in the calculations.

The following table shows the State Public Debt at current rates of exchange:

State Public Debt at 30 June 1981: At Current Rate of Exchange, Tasmania				
Place in which debt repayable	Amount in currency in which raised		\$ Aust. at current rates of exchange	
	Currency	Debt (^{'000})	Conversion rate of \$A (a)	Debt (\$A ^{'000})
Australia	\$A	1 018 553	—	1 018 553
London	£ sterling	636	£ stg 0.5890	1 080
New York	US\$	1 284	US\$ 1.1475	1 119
Netherlands	Guilders	162	3.0510	53
Total .....	..	..	..	1 020 804

(a) Exchange rates at 30 June 1981 for \$A1.

The growth of the public debt, expressed at current rates of exchange (as at 30 June for year shown), is shown in the following table:

State Public Debt: Place of Flotation and Interest Payable, Tasmania (\$'000)							
At 30 June	Debt redeemable in—					Total Debt	Interest payable
	London	New York	Canada	Nether- lands	Australia		
1976	2 551	3 462	546	287	746 952	753 797	53 748
1977	2 570	3 276	537	292	804 336	811 012	60 437
1978	1 977	2 439	449	252	864 980	870 097	68 233
1979	1 234	1 895	389	213	918 827	922 559	73 604
1980	1 295	1 410	364	145	966 735	969 948	80 205
1981	1 080	1 119	—	53	1 018 553	1 020 804	91 494

A notable feature of the State Public Debt is that approximately 99 per cent of indebtedness is now domiciled in Australia. There has been a gradual change from the situation which existed a century ago when nearly all loans were financed in London.

Public Debt Transactions

Securities in the form of bonds, inscribed stock and debentures are issued by the Commonwealth for and on behalf of Tasmania. Under the Financial Agreement of 1927, redemption and conversion of loans is carried out by the National Debt Sinking Fund Commission.

With the amendment, in 1975, to the Agreement of 1927, a new base for the provision of Sinking Funds by the states was established. The agreement, which is to continue until 1985, provided for a base payment by Tasmania of \$7m per annum. For the period until 1985 Tasmania's contribution to the Sinking Fund is to be increased or reduced by 1.2 per cent per annum of the amount by which the public debt thereafter is increased or diminished.

The following table shows particulars of loans raised and redeemed annually during the most recent four-year period expressed at current rates of exchange. It will be observed that redemption of loans falling due in any particular year is achieved, in the main, by conversion (i.e. by renewal of the original loans on new terms and conditions).

State Public Debt: Conversion and Redemption at Current Rates of Exchange, Tasmania
(*\$'000*)

<i>Particulars</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Loans raised for—				
New capital purposes	66 992	66 992	58 267	61 579
Conversion purposes	84 224	80 361	4 130	960
Redemption of maturing loans	2 481	93	58 401	188 804
Total raisings	153 697	147 446	120 798	251 343
Less Loans redeemed—				
By conversion	84 224	80 361	4 130	960
From new cash raisings	2 293	—	58 324	187 737
From National Debt Sinking Fund (a)	8 094	14 623	10 954	11 790
Net increase in public debt	59 086	52 462	47 389	50 856
Debt at end of year	870 097	922 559	969 948	1 020 804

(a) Includes a balancing item due to fluctuation in exchange rates during the year, the actual redemption being \$8 138 000 in 1977-78 and \$14 927 000 in 1978-79 and \$10 964 000 in 1979-80 and \$11 540 000 in 1980-81.

The next table summarises the transactions of the National Debt Commission in relation to the Tasmanian Public Debt:

National Debt Commission Transactions in Respect of Tasmanian Public Debt
(*\$'000*)

<i>Particulars</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Balance at beginning of period	2 952	4 623	457	970
Contributions—				
From— Federal Government	2 225	2 386	2 544	2 675
State Government	7 535	8 224	8 903	9 466
Interest received (net)	50	152	29	16
Funds available	12 761	15 384	11 934	13 127
Less redemption and re-purchase at current rates of exchange	8 138	14 927	10 964	11 540
Balance at end of period	4 623	457	970	1 587

The National Debt Commission was established as part of the 1927 Financial Agreement and its function is to administer a single consolidated sinking fund in respect of the debt of the Federal and state governments. (The obligations of the states and the Federal Government in contributing to the consolidated sinking fund are set out earlier in this chapter in a section headed 'Payments Under the Financial Agreement (1927)').

TAXATION

Taxation in Tasmania

As Australian citizens, Tasmanians are subject to taxes levied both by the State and the Federal Government. The next table shows taxes (total amounts and per capita figures) collected by the State Government and semi-government authorities in Tasmania and Federal Government collections for Australia:

Taxation: State of Tasmania and Federal Government 1980-81 (a)

Tax	Amount (\$'000)		Per head of population (\$)	
	Tasmania (b)	Federal Government (c)	Tasmania	Federal Government
Income (personal and company)	—	22 398 908	—	1 512.61
Customs and excise	—	7 633 513	—	515.50
Sales	—	2 102 254	—	141.97
Pay-roll	52 056	10 713	122.40	0.72
Probate and succession duties	3 030	17 123	7.12	1.16
Motor	29 735	—	69.91	—
Stamp duties	21 004	—	49.39	—
Land	6 110	—	14.37	—
Racing	4 977	—	11.70	—
Liquor	5 325	—	12.52	—
H.E.C. statutory levy	3 706	—	8.71	—
Fire levy	5 825	—	13.70	—
Casino tax and licence fees	2 978	—	7.00	—
Soccer football pools tax	355	—	0.83	—
Coal export duty	—	84 947	—	5.74
Primary production tax	—	352 753	—	23.82
All other	15	229 543	0.04	15.50
Total	135 116	32 829 754	317.70	2 217.01

(a) Collections from all sources, including amounts paid to special funds.

(b) State taxes collected by Tasmanian Government and other state authorities.

(c) Federal Government taxes collected for Australia as a whole.

In addition to the taxes shown in the above table Tasmanian property owners also pay rates and licence fees to local government authorities. Total rates and licence fees collected during 1980-81 amounted to \$66.2m or \$155.69 per head of mean population.

Assuming that Tasmanians contributed to Federal Government taxation in strict proportion to the relative mean populations of the State and Australia, it would be theoretically correct to add the three per capita figures (\$317.70, \$2 217.01 and \$173.74) and arrive at a figure of \$2 708.45 as the *total per capita taxation* of all levels of government on residents within the State. However, there are inaccuracies involved in this method. For a number of federal taxes (e.g. pay-roll tax and rates on land paid to the Federal Government by residents of the ACT, and coal export duty) Tasmanians pay minimal or no tax. An alternative way of examining the problem is to refer to total Federal Government taxes collected in Tasmania but this measure is unsatisfactory for a number of reasons, the chief defects being:

- (i) Central office collections of Federal Government taxation ceased at 30 June 1970 and for the income years after 1969-70 all assessments have been handled in state offices of the Taxation Department. The effects of this change are deceptive because income tax *collected in Tasmania* does not necessarily directly relate to income *earned in Tasmania* (e.g. a company with branches in Tasmania but with its head-office in Melbourne would normally submit its tax return to the Victorian Taxation Office). (The 1976 *Year Book* includes a special article on the location of control of Tasmanian business establishments—pp. 404-406.)
- (ii) Goods shipped to Tasmania will, in some cases, already have been taxed in another state in respect of customs or sales taxes. Even though other states are credited with the collection of these taxes, the fact remains that Tasmanians bear their incidence in the form of increased commodity prices. The amount of tax collected in other Australian states on goods shipped to Tasmania is not known.

Estimated Incidence

In assessing the collection in other Australian states of two taxes affecting Tasmanians, account is taken of selected sales figures derived from the latest Retail Census (for 1979-80) which showed Tasmanian *per head* sales to be 96.0 per cent of the corresponding Australian figure. Accordingly the *per head* incidence of customs and sales taxes in Tasmania is taken to be 96.0 per cent of the Australian *per head* collection figure for each tax. Estimates are compiled using these *per head* figures and the State's mean population.

**Taxation Collected by the Federal Government in Tasmania and Elsewhere,
and Estimated Incidence in Tasmania
(\$'000)**

<i>Tax</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Collected in Tasmania—			
Income tax (a)	352 763	400 958	462 606
Estate duty (a)	1 283	619	146
Gift duty	132	12	1
Stevedoring industry charge	1 053	—	—
Primary production taxes	3 969	4 957	4 937
Sales tax	25 411	25 351	27 493
Customs	11 863	14 187	16 934
Excise	74 359	77 495	77 007
Other	634	1 119	1 291
Total collected in Tasmania	471 467	524 698	590 415
Collected elsewhere in Australia (b)—			
Sales tax	23 836	26 493	30 470
Customs	26 064	28 573	32 681
Estimated incidence (c)	521 367	579 764	653 566

(a) Tax collected in Tasmania may not directly relate to income earned and assets in Tasmania since a multi-state return can be lodged in any one state office.

(b) Estimated; goods on which these taxes were paid are assumed to have been sold in Tasmania.

(c) Excludes company income tax collected in other states in respect of establishments operating in Tasmania.

The above table shows actual collections of the Federal Government taxes in the State and also the estimated incidence of taxes (other than income tax and estate duty) collected elsewhere in Australia.

Federal Government Income Tax

Income tax, the most important revenue raising levy in Australia, was introduced in 1884 by the colony of South Australia. In the course of time this form of taxation was adopted by all the state governments and the Federal Government between 1884 and 1915. From 1915 to 1942 the state and Federal Governments imposed income taxation concurrently, the rate of state income tax varying from state to state. Uniform taxation on incomes throughout Australia was adopted in 1942, as a war measure, when the Federal Government became the sole authority levying this tax. However, under a new scheme introduced by the Federal Government in 1977-78, each state was given the right to impose a surcharge or grant a rebate on personal income tax in its state (see 'Personal Income Tax Sharing with the States' earlier in this chapter).

Income Tax Rates

Details relating to the amounts of income tax payable by companies and by individuals are included in Chapter 19.

Personal Income Tax Assessed in Tasmania

The next tables show the number of taxpayers, taxable income and income tax assessed during the year 1979-80 (income year 1978-79) and earlier years. The following definitions apply:

Net Income: Assessable income *less* deductions for expenditure incurred in earning that income (but before deductions for concessional allowances).

Individuals (Excluding Companies): Includes residents and non-residents assessed in Tasmania.

Taxable Income: Net income *less* concessional deductions in respect of dependants, life assurance, etc. up to 1974-75; net income *less* deductions for gifts to approved funds or institutions and for allowable housing loan interest for 1975-76 and 1976-77.

Tasmania, Income Tax: Individuals (a)

Income Year	Number of taxpayers			Taxable income (b)	Net income tax assessed			Increase in the C P I (c)
	Males	Females	Persons		Total	Per taxpayer		
						Amount	Increase (d)	
				\$'000	\$'000	\$	per cent	per cent
1973-74	103 903	50 815	154 718	688 577	134 109	867	35.9	12.9
1974-75	105 639	56 602	162 241	917 430	180 392	1 112	28.3	16.7
1975-76	102 881	50 044	152 925	1 206 315	242 312	1 585	42.5	r 12.8
1976-77	105 481	52 757	158 238	1 376 389	296 948	1 877	18.4	r 14.0
1977-78	105 895	52 760	158 655	1 514 146	309 916	1 953	4.0	r 9.4
1978-79	105 814	51 703	157 517	1 653 118	337 459	2 142	9.7	8.2

(a) For definitions, see text above.

(b) Up to 1974-75, net income *less* concessional deductions in respect of dependants, etc. From 1975-76, such concessional deductions in respect of dependants, rates, life assurance, etc. were replaced by tax rebates which are deducted from gross tax payable to arrive at net tax assessed.

(c) Over the previous year for the all groups weighted average of the six capital cities index.

(d) Increase on previous year.

The following table dissects the number of taxpayers, income tax assessed, etc. by grade of net income for the income year 1978-79. Average weekly earnings per employed male unit for Tasmania are provided in Chapter 10.

Tasmania, Income Tax: Income Year 1978-79—Individuals (a)

Grade of net income	Number of Taxpayers			Cumulative percentage of taxpayers	Total taxable income	Net income tax assessed
	Males	Females	Persons			
\$				%	\$'000	\$'000
1— 4 999	6 554	8 934	15 488	9.8	66 965	2 924
5 000— 5 999	5 378	6 749	12 127	17.5	66 752	6 236
6 000— 6 999	6 108	5 886	11 994	25.1	78 009	9 801
7 000— 7 999	7 073	5 736	12 809	33.3	96 137	14 404
8 000— 8 999	9 416	6 509	15 925	43.4	135 532	22 900
9 000— 9 999	11 486	5 031	16 517	53.9	156 878	28 598
10 000—10 999	11 514	3 463	14 977	63.4	157 056	30 246
11 000—11 999	9 984	2 551	12 535	71.3	143 882	29 210
12 000—12 999	7 992	1 699	9 691	77.5	120 926	25 587
13 000—13 999	6 609	1 356	7 965	82.5	107 376	23 536
14 000—14 999	5 295	971	6 266	86.5	90 709	20 389
15 000—15 999	4 166	716	4 882	89.6	75 603	17 478
16 000—17 999	5 510	787	6 297	93.6	106 477	25 768
18 000—19 999	3 054	434	3 488	95.8	65 948	17 343
20 000—21 999	1 867	260	2 127	97.2	44 388	12 506
22 000—23 999	1 008	135	1 143	97.9	26 219	7 762
24 000—25 999	722	107	829	98.4	20 642	6 375
26 000—27 999	407	70	477	98.7	12 866	4 143

continued next page

Tasmania, Income Tax: Income Year 1978-79—Individuals (a)—continued

Grade of net income	Number of Taxpayers			Cumulative percentage of taxpayers	Total taxable income	Net income tax assessed
	Males	Females	Persons			
\$				%	\$'000	\$'000
28 000—29 999	291	65	356	99.0	10 321	3 437
30 000—31 999	263	49	312	99.2	9 670	3 267
32 000—39 999	612	105	717	99.6	25 292	9 188
40 000—49 999	261	37	298	99.8	13 195	5 392
50 000—99 999	211	42	253	100.0	22 276 }	10 970 }
100 000 and over	33	11	44	100.0		
Total	105 814	51 703	157 517	..	1 653 118	337 459

(a) For definitions, see text above.

State Taxation

In the section on the Consolidated Revenue Fund, taxes collected by the Tasmanian Government are shown in summarised form.

The next table gives full details of State taxation. It should be noted that certain taxes are reserved for special purposes. Examples are: (i) motor taxation—the 'motor tax' and 'public vehicle fees' components of this item (\$16 048 390 in 1979-80) are passed from Consolidated Revenue to the State Highways Trust Fund; and (ii) racing and gaming taxes—all racing and gaming taxes paid to special funds are passed to the racing clubs.

State Taxation Collections, Tasmania (a)
(\$'000)

Tax	1978-79	1979-80	1980-81
Deceased persons' estates duties	5 549	3 859	3 030
Stamp duties (excluding bookmakers' tickets)—			
Cheques	1 377	1 610	1 691
Hire purchase and related agreements	2 503	2 610	2 924
Loan Duty	245	1 227	1 777
Legal documents, etc.	7 384	8 516	9 443
Adhesive revenue stamps	655	433	375
Insurances	3 896	4 119	4 424
Marketable securities	224	509	370
Land tax	4 867	5 126	6 110
Motor taxation—			
Paid to—Consolidated Revenue	25 100	25 677	29 313
Special funds	100	341	422
Levy paid to fire authorities (b)	4 078	4 258	5 825
Liquor tax and related licences (c)	4 228	4 693	5 325
Racing and gaming taxes—			
Paid to—Consolidated Revenue	3 253	3 237	3 529
Adjustment (d)	—220	—75	+76
Special funds	938	991	1 373
Pay-roll tax	40 656	45 870	52 056
Hydro-Electric Commission statutory levy	1 401	3 237	3 705
Casino tax and licence fees	2 640	2 836	2 978
Soccer football pools tax	297	384	355
Other sundry licences	13	15	15
Total	109 184	119 473	135 116
Percentage increase	14.2	9.4	13.1

(a) Collections from all sources of taxation, including amounts paid to special funds.

(b) Paid by insurance companies direct to the Fire Brigades Commission and the Rural Fires Board until 31 October 1979. As from 1 November the amount was paid to the State Fire Commission.

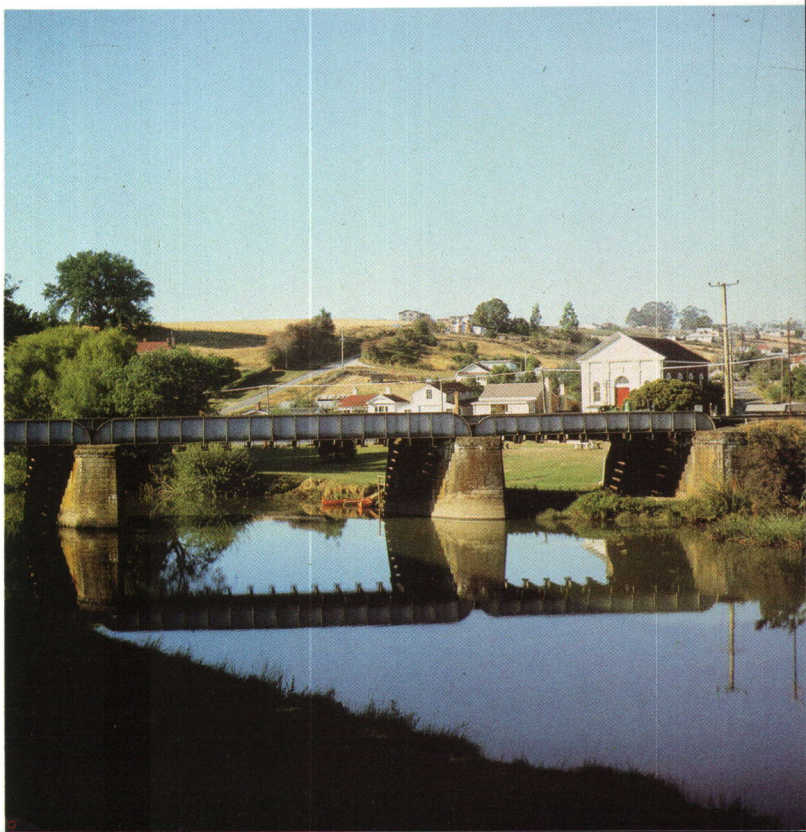
(c) See later section 'Fees and Licences under the Licensing Act' for details.

(d) For different accounting periods.

*Mt Roland, North-West Coast
(Tasmanian Government
Stills Photographic Section)*



Meander River, Deloraine





Queenstown, West Coast

(Tasmanian Government Stills Photographic Section)

Boat Harbour, North-West Coast



State Land Tax

Rates of tax were changed by the *Land Tax Act 1976*. The main provisions of the Act were: (i) land tax on rural land was abolished from 1976-77 onwards; (ii) land tax was to be levied on land values, not unimproved values; (iii) exemption of tax in respect of urban land valued at \$4 699 or less, compared with the previous exemption up to \$1 999; and (iv) land valued at between \$4 700 and \$10 000 attracted less tax than previously.

The *Land Tax Act 1978* maintained these provisions and provided for a home owner's rebate. for 1978-79, home owners could claim a rebate of land tax if the land value of urban land owned was less than \$50 000. The amount of the rebate was as follows:

- (i) where the land value of the relevant land was not more than \$30 000, the full amount of land tax otherwise payable; and
- (ii) where the land value of the relevant land was from \$30 001 to \$50 000, \$295 less \$14.75 for each full \$1 000 by which the land value exceeded \$30 000.

State Land Tax: Value of Taxable Properties and Tax Assessed, Tasmania
(\$'000)

Year	Gross unimproved value				Gross land value of urban land	Tax assessed			
	Urban	Rural	Composite (a)	Total		Urban	Rural	Composite (a)	Total
1975-76	414 793	29 109	33 305	477 207	n.a.	3 776	256	393	4 425
1976-77 (b)	334 866	3 800	—	—	3 800
1977-78	452 356	4 771	—	—	4 771
1978-79	612 636	5 494	—	—	5 494
1979-80	645 028	5 693	—	—	5 693
1980-81	687 155	6 610	—	—	6 610

(a) Properties made up of both urban and rural land.

(b) From 1976-77 onwards land tax on rural land was abolished. Land tax is now levied on land value *not* unimproved value.

In October 1979, the State Treasurer announced that no land tax would be payable in respect of land on which is situated the owner's principal residence, regardless of its value, from 1979-80. This provision was included in the *Land Tax Act 1979* which fixed the following rates of land tax in respect of taxable urban land for 1979-80:

State Land Tax: Urban Land, Tasmania, 1979-80 and 1980-81 (a)

Taxable land value bracket	Marginal tax rate (b)	Tax payable	
		On land value in bracket specified in first column	On higher figure in first column
		\$	\$
0— 5 000 (c)	0.10	5.00	5.00
5 001— 15 000	0.50	50.00	55.00
15 001— 25 000	0.75	75.00	130.00
25 001— 50 000	1.00	250.00	380.00
50 001— 75 000	1.25	312.50	692.50
75 001—100 000	1.50	375.00	1 067.50
100 001—125 000	1.75	437.50	1 505.00
125 001—150 000	2.00	500.00	2 005.00
150 001—200 000	2.25	1 125.00	3 130.00
200 001—250 000	2.50	1 250.00	4 380.00
Over 250 000	2.75		

(a) No tax is payable in respect of land on which is situated the owner's principal residence.

(b) Tax payable in respect of each dollar in the range specified.

(c) No tax payable where the land value is \$4 999 or less.

State Deceased Persons' Estate Duties

The legislation dealing with State deceased persons' estate duties is contained in the *Deceased Persons' Estates Duties Act 1931* (as amended).

No estate duty has been payable on estates in Tasmania passing to a deceased's spouse since 1 January 1979.

Estate duties on estates passing to a deceased's children or grandchildren were abolished from 1 January 1980.

The following table gives details of assessments for 1980-81:

State Deceased Person's Estate Duties Number of Estates, Net Value and Tax Assessed, Tasmania, 1980-81					
Grade of dutiable value	Estates		Net value as assessed	Total duty assessed (a)	Average duty per taxable estate
	Examined	Taxable			
	no.	no.	\$'000	\$'000	\$
1— 500	22	—	2	—	—
501— 1 000	10	—	8	—	—
1 001— 1 500	8	—	11	—	—
1 501— 2 000	8	1	15	—	110
2 001— 3 000	9	—	19	—	—
3 001— 4 000	19	—	67	—	—
4 001— 5 000	24	6	141	1	213
5 001— 6 000	25	7	131	1	131
6 001— 8 000	43	5	301	1	235
8 001— 10 000	52	12	454	4	361
10 001— 15 000	154	43	1 891	26	603
15 001— 20 000	139	40	2 395	48	1 190
20 001— 30 000	349	106	8 877	192	1 811
30 001— 40 000	259	62	8 781	207	3 347
40 001— 50 000	169	53	7 322	236	4 445
50 001—100 000	324	119	20 938	727	6 112
100 001—150 000	84	39	8 960	472	12 100
150 001 and over	106	52	23 234	1 190	22 887
Adjustments	—	—	—	-130	..
Total	1 804	545	83 545	2 976	..

(a) Rates of duty and levels of exemption vary according to the class of beneficiary and the type of asset contained in the estate (details may be obtained from the Public Trustee).

Motor Taxation

The chief components of motor taxation are: (i) motor tax assessed on a power-weight formula; (ii) vehicle registration fees; (iii) drivers' and riders' licences; and (iv) other registration fees mainly related to public vehicles.

Details of motor taxation collections are shown in the following table:

State Motor Taxation, Tasmania (\$'000)			
Particulars	1978-79	1979-80	1980-81
Motor tax	14 388	14 925	17 729
Public vehicle fees (a)	1 129	1 238	760
Stamp duty on—Third party insurance	468	473	465
Vehicle registration	4 265	5 043	5 370

continued next page

State Motor Taxation, Tasmania
(S'000)—*continued*

<i>Particulars</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Other traffic fees (b)	4 950	4 112	5 109
Total	25 200	25 792	29 433
Paid into Consolidated Revenue Fund	25 100	25 677	29 313
Retained by Transport Commission	100	115	120

(a) Includes public vehicle fees retained by Transport Commission.

(b) Includes registration fees, licences, number plate charges, transfer fees and learners' permits.

'Motor tax' plus most of the item 'public vehicle fees' shown in the above table are paid to the State Highways Trust Fund. (The amount paid over in 1980-81 was \$18 368 681.)

Fees and Licences under the Licensing Act

The State raises revenue from hotels, clubs, restaurants and liquor wholesalers by: (i) licensing; and (ii) imposing 'percentage fees' based on turnover for the year *preceding* collection.

Fees and Related Licences Collected Under the Licensing Act, Tasmania
(S'000)

<i>Fees</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Percentage fees (a)—			
General, club, on-licences	3 506	3 907	4 394
Off-licences	691	751	896
Other fees	31	35	35
Total	4 228	4 693	5 325

(a) Based on liquor purchases by hotels and direct sales by wholesalers to the public.

Gambling Taxation

The following table shows gambling turnover for recent years:

Turnover from the Major Forms of Legal Gambling, Tasmania
(Source: Tasmanian Racing and Gaming Commission)
(\$ million)

<i>Particulars</i>	<i>1975-76</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Racing						
T.A.B.	27.0	33.0	38.6	41.8	46.7	55.7
On-course tote	2.0	2.3	2.3	2.2	2.5	4.2
Bookmakers	42.0	47.7	47.5	47.3	49.0	55.0
Total racing turnover	71.0	83.0	88.4	91.3	98.2	114.9
Casino	34.4	40.5	44.0	<i>p</i> 50.6	56.0	59.0
Tattersalls & Tattslotto	2.1	6.9	11.0	16.9	22.2	25.2
Soccerpools	0.4	0.9	0.9	1.0	1.3	1.2
Raffles (a)	n.a.	n.a.	n.a.	2.2	2.0	1.0
Other minor gambling (a) (b)	n.a.	n.a.	7.0	9.5	14.8	17.1
Total gambling turnover	n.a.	n.a.	n.a.	<i>p</i> 171.5	194.5	218.4

(a) Estimates only.

(b) Lucky envelopes, bingo, punch boards, etc.

Racing Taxation: Amendments to the *Racing and Gaming Act* in 1974 established the Totalisator Agency Board from January 1975, operating both on and off course

totalisator betting, and restricted the operations of licensed bookmakers to on-course betting only. (For further details on the rates of taxation on racing, see the 1977 *Year Book*.)

Details of racing taxation collections and distribution for recent years are shown in the next table:

State Racing Taxation: Collection and Distribution, Tasmania
(S'000)

Particulars	1978-79	1979-80	1980-81
<i>Racing Taxation Receipts</i>			
Totalisator tax (a)	2 502	2 535	3 093
Bookmakers' commission and licences	1 407	1 570	1 836
Stamp duty on bookmakers' tickets	53	48	49
Refunds	9	—	—
Total	3 971	4 153	4 977
<i>Distribution of Racing Taxation Receipts</i>			
Paid into Consolidated Revenue Fund	3 253	3 237	3 529
Adjustment (b)	— 220	— 75	+76
Commission payable to racing clubs	938	991	1 373
Total	3 971	4 153	4 977

(a) Includes amounts received by the Racing and Gaming Commission for payment to Consolidated Revenue. Excludes amounts related by the Totalisator Agency Board.

(b) An adjustment item is necessary to reconcile items referring to different accounting periods.

State Taxation on Lotteries: From 1942 (when the Federal Government became the sole collector of income tax), lotteries conducted from Hobart by Tattersalls (George Adams Estate) were Tasmania's chief source of revenue through State taxation. On 14 July 1954, the promoters transferred their operations to Victoria. A new organisation—Tasmanian Lotteries—was granted a licence and operated until 30 September 1961, when the proprietor surrendered the licence. No operator is now licensed.

In September 1960, the *Racing and Gaming Act* 1952 was amended to permit agreements with other states for the sale of their lottery tickets in Tasmania. Under an agreement with the Victorian Government, Tattersalls was allowed to sell tickets through accredited Tasmanian representatives; the Victorian Government was to pay quarterly to the Tasmanian Government 15½ per cent of the value of subscriptions made as a result of this concession. The duty payable was increased to 16¼ per cent from 1 January 1979.

The following table shows the payments made under the interstate agreement for recent years:

Payments to Tasmanian Government Based on Sale of Tattersalls Lottery Tickets
(S)

Year	Amount	Year	Amount
1973-74	227 770	1977-78	1 695 564
1974-75	300 810	1978-79	2 536 158
1975-76	330 660	1979-80	3 570 867
1976-77	(a) 1 065 487	1980-81	4 953 361

(a) Includes \$135 533 due for the year 1975-76 but not received until July 1976.

Casino Tax and Licence fees: The rate of casino tax and the licence fee were established by an agreement made in September 1968 between the State Treasurer, Federal Hotels Ltd and Australian National Hotels Ltd. The agreement was ratified by the *Wrest*

Point Casino Licence and Development Act 1968. The casino tax is calculated according to a graduated scale based upon monthly gross profit and is payable monthly. Initially, rates ranged from five per cent of gross profit where that profit was less than \$25 000 for the month to 30 per cent where the gross profit exceeded \$125 000. The licence fee was fixed at \$2 500 per month.

Early in 1975 the State Government received a submission from Australian National Hotels Ltd for changes in the tax scale. As a result, the effective maximum rate of tax was reduced to 25 per cent. This reduction was effected, from 1 June 1975 to 30 November 1976, by the remission of one sixth of the tax paid through an appropriation from Consolidated Revenue. An amendment to the Act passed in November 1976 reduced the actual maximum rate of tax to 25 per cent. In this chapter, taxation receipts have been recorded *net* of the remission of casino tax and, consequently, total receipts and expenditure for consolidated Revenue are slightly less than the totals recorded by the State Treasurer.

Details of casino taxation collections are shown in the following table:

Casino Tax and Licence Fees, Tasmania
(\$'000)

<i>Particulars</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Casino tax	2 610	2 806	2 948
Licence fee	30	30	30
Total	2 640	2 836	2 978

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Chapter 5

LOCAL GOVERNMENT

HISTORICAL

Structure

Introduction

In Tasmania, the functions of local government are more restricted than in some other countries as the State Government takes direct responsibility for important services such as the police, education, housing, public transport, etc. This peculiarity is not confined to Tasmania and is encountered in the other Australian states, where central control is exercised over functions often delegated to local government authorities in overseas countries. The origin of this tendency probably lies in early colonial history when the continent was virtually empty but the apparatus of government existed at each of the new coastal settlements (Sydney, Hobart, Perth, Melbourne, Adelaide and Brisbane, in order of age). In the Australian situation strong central administrations came first. Local government was a much later growth, the initiative for its creation often coming from the central administration itself in the respective colonies.

The first division of Tasmania into local administrative districts occurred in 1827 when the Colony was split into nine police districts; each district was under the control of a magistrate whose functions were primarily disciplinary and connected with administering the convict system. From then, the development of local government in Tasmania followed three distinct phases as outlined below.

Tasmanian Cities

From 1835 to 1857 several acts were passed relating to the local government of Hobart and Launceston—Hobart Town was granted elected commissioners in 1846, and under an Act of 1852, both Hobart and Launceston were given elected municipal councils. In 1857 the City of Hobart was incorporated as was the Town of Launceston one year later. Launceston was proclaimed a city in 1888. For the next 76 years these were the only two cities in the State. In 1964 Glenorchy was granted city status and in 1981 Devonport was also proclaimed a city.

The form of local government in Hobart and Launceston is governed by separate Corporation Acts for each authority; in the cases of Glenorchy and Devonport, however, their operation as cities is provided for in the *Local Government Act 1962*.

Rest of State before 1906

The first step towards the creation of rural municipalities came with the *Rural Municipalities Act 1858*. Between 1860 and 1863, 16 municipalities had been proclaimed but the nine police districts were also retained under magisterial control. The Act of 1858 was repealed in 1865 and a new *Rural Municipalities Act* became law. The State was then divided into thirty municipal districts with defined boundaries. However, only 19 of these actually had councils. One more district was added in 1880. The City of Hobart and the Town of Launceston were exempted from the Act.

By 1906 there were, in addition to the city councils for Hobart and Launceston and the municipal district councils, many boards and trusts in Tasmania created for specific local government purposes. These had been formed in respect of water, drainage, roads, rabbits, health, fruit, recreation grounds, schools, works and other matters. There were

in existence 105 road trusts, 19 rural municipalities, 23 town boards and 2 city councils; a total of 149 local authorities.

Rest of State after 1906

The *Local Government Act* 1906 abolished all rural municipalities, town boards, water trusts, main road districts, etc. and replaced them with municipalities which took over the administration of all the local government functions previously administered by the numerous local bodies. Section 10 of the Act provided that a commission should divide the State into not more than 60 districts to be later proclaimed municipalities. The commission reported in 1907 and recommended that the State be divided into 50 municipalities. These did not include the cities of Hobart and Launceston which were governed respectively by the *Hobart Corporation Act* 1883 and the *Launceston Corporation Act* 1894. The above recommendations were carried into effect by proclamation of the 50 municipalities. Subsequently, three of the municipalities were amalgamated — Queenborough and New Town with Hobart, and Invermay with Launceston. Glenorchy became a city in 1964 and Devonport in 1981. Hence there are 45 municipalities and four cities in existence at the present time. Apart from the enlargement of Hobart and Launceston caused by the above amalgamations, the boundaries are still substantially the same as those proclaimed in 1907, although there have been numerous relatively minor boundary changes since then.

Inquiries into Local Government

Royal Commission 1938

A Royal Commission was set up in December 1938 to inquire into and report upon certain aspects of local government in Tasmania. It issued its report on 11 August 1939. Recommendations covered administration and finance, the bases of valuation and assessment, the best form of local government, the number of municipal bodies, wards, the system of rating and co-ordination between municipal and State governments. One of the specific recommendations was that the number of municipal bodies should be reduced to two cities, three urban municipalities and thirty-four rural municipalities. However, this recommendation was not implemented.

Select Committee 1960

On 16 November 1960, a select committee of the House of Assembly was appointed to inquire into and report on local government. One of its terms of reference was 'whether amalgamation of certain municipalities would be of advantage to local government administration by creating greater efficiency and cutting down administrative costs'. It made its report on 1 August 1961. In relation to the above term of reference, the Committee recommended that it was essential that there be a reduction in the number of municipalities in Tasmania and that to achieve this all boundaries should be reassessed as a matter of urgency by qualified experts, having regard to geographic, economic and population conditions.

Municipal Commission 1962

In 1962 the *Local Government Act* was passed; this statute repealed the *Local Government Act* 1906 and other legislation relating to local government and consolidated the legislation in one Act. The 1962 Act also included provision for establishment of a Municipal Commission to inquire into and report on local government administration in Tasmania. In 1965 the Commission submitted its report recommending numerous amalgamations and boundary changes. If the changes had been put into effect there would have been two cities and 18 other municipalities. However, as a result of protracted litigation the State Government decided to amend the provisions of the 1962 Act under which the Commission was constituted, the 1965 report was not acted upon and the Commission was disbanded in March 1971.

Municipal Commission 1972.

In 1971 amendments were made to the *Local Government Act* 1962 in relation to appointment, functions and powers of a new Municipal Commission. The new Municipal

Commission was appointed on 31 May 1972. The terms of reference given to the Commission included investigation of whether there should be creation, abolition, amalgamation or partitioning of any municipality. The Commission presented its completed report to the Minister for Local Government on 28 March 1974.

Extensive amalgamations and boundary re-arrangements of municipalities were recommended. If implemented, the latter proposals would have reduced the number of local government authorities by 14 (from 49 to 35) and extended the boundaries of Launceston City to incorporate most of the urban development around Launceston. The Commission reached the conclusion that the pattern of municipal boundaries in Tasmania was such that there must be some wasteful expenditure and a lower level of efficiency than would be obtained by some re-arrangement of the boundaries. A more detailed account is contained in the 1975 *Year Book*.

Release of the recommendations of the Municipal Commission caused an immediate unfavourable reaction in most of the municipalities affected by the proposed boundary changes. In August 1974, the State Parliamentary Labor Party met to consider the Commission's Report and decided that it should not be acted upon. As a result, the Report was not placed before Parliament for consideration.

Board of Inquiry 1978

This Board was constituted to report upon local government in the Tamar Valley. The local government areas which were scrutinised were Launceston, Beaconsfield, Evandale, George Town, Lilydale, Longford, St Leonards and Westbury. The Board recommended that the Tamar Valley would be best served by the dissolution of the existing eight councils and the creation of three new authorities to replace them (see 1980 *Year Book* for detailed account of recommendations). It was intended that the new municipalities would come into existence on 1 July 1981. A strong campaign to prevent amalgamation was waged by several Tamar Valley councils. Legislation for amalgamation passed through the House of Assembly but did not pass the Legislative Council. The Legislative Council set up the 'Select Committee on the Local Government Re-organisation (Tamar Valley) Bill 1981' to investigate these changes.

The Select Committee was reconstituted in October 1982 and has been directed by the Legislative Council to inquire into and report upon:

- (i) The need for and the desirability of rationalising local government in the Tamar region;
- (ii) How best to give effect to any rationalisation recommendations;
- (iii) The effect that any rationalisation of local government in the Tamar region could be expected to have on local government in any other area of Tasmania;
- (iv) Whether a cost benefit study may be a necessary and practical requirement before implementing rationalisation recommendations;
- (v) Whether a poll of electors is both desirable and practical before implementing rationalisation recommendations;
- (vi) Any other matters arising from the above and incidental thereto.
- (vii) The evidence of the previous committee.

LOCAL GOVERNMENT—PRESENT ORGANISATION

Authority and Functions

The authority for, and the forms of, local government are prescribed entirely by State legislation which has largely been consolidated in the *Local Government Act 1962*. Hobart and Launceston cities operate under separate corporation Acts but the other authorities, including the cities of Glenorchy and Devonport, operate under the Act of 1962.

The functions of the municipalities are set out in broad general terms in Section 176 of the *Local Government Act* as:

'A Municipality: (a) may for the welfare and good government of its district and the inhabitants thereof: (i) make by-laws; (ii) undertake, make and maintain works, buildings and services; and (iii) order and dispose the common affairs of its members; and (b) shall cause the Queen's peace to be kept and maintained within its districts.'

Particular authority is given by Section 180 for a council clerk to be a deputy clerk of the peace, registrar of the court of general sessions and clerk of petty sessions in his municipality.

In addition, by certain Acts, the municipalities are given specific responsibilities, e.g. *Health Act*, *Local Courts Act*, etc.

Administration of Justice

Municipalities traditionally administered the lower courts of justice in Tasmania but during 1980 this responsibility was transferred to the State Government.

Population

The estimated resident population of Tasmania's local government areas at 30 June 1981 ranged from as low as 130 in Gormanston Municipality to a high of 47 620 for the City of Hobart. Of the 49 local government areas in the State, seven had populations of under 1 000 (see Chapter 6, Demography, for further details).

Electors

Persons eligible to vote in local government elections must be either: (i) an owner or occupier of rateable land who is a British subject over the age of 18 years; or (ii) a person who has lived in a municipality for a period of at least six months and is enrolled as an elector for the Legislative Council or House of Assembly in respect of a division or subdivision that includes whole or part of the municipality.

In 1972 the *Local Government Act* 1962 was amended and plural voting abolished; an elector may now exercise, at the most, three votes—one in his own right and two on behalf of other persons.

In no Australian state are unnaturalised aliens, who are owner-occupiers, eligible to vote at local government elections; Tasmania is the only State with a provision for aliens to have another person vote on their behalf.

Councillors

A councillor must be an elector of, and either reside, or carry on business, in the municipality and is subject to disqualification for certain breaches of conduct. The term of office is three years and one-third of the council retires each year. Councils may comprise six, nine, 12 or 15 councillors. The warden, deputy warden and treasurer are elected by the council members on an annual basis. The electors of the City of Hobart elect the Lord Mayor and in Glenorchy and Devonport the electors elect the Mayor. However, the Mayor of Launceston is elected by council members. The office of warden is comparable with that of the mayor of a city or the president of a shire in other states.

Government Intervention

For any of a number of reasons, the Minister administering the *Local Government Act* may consider it necessary to recommend suspension of the elected councillors and the appointment of a commission, or in certain cases an administrator, to carry on municipal government in a particular municipality.

Cities, Municipalities and Towns

In Tasmania there are only two categories of local government; a municipality or a city. The Act provides for the establishment of towns and indicates requirements before such towns are proclaimed but these are not municipal administrative units. Generally an area is proclaimed as a town to bring into action certain provisions relating to rating and building requirements. Before a municipality can petition for a town or municipal

area to become a city, it must have had, for five years before the petition, an average population of not less than 20 000.

Other than this population requirement for a city there are no provisions, such as exist in some of the other states, for enlarging or diminishing the status of municipalities to accord with increasing or decreasing population.

Area of Municipalities and Cities

In the table that follows, the measured areas of local government areas have been rounded to the nearest 10 square kilometres and the area of Tasmania has been rounded to the nearest 100 square kilometres as the accuracy of more detailed measurement is difficult to determine. Where municipal boundaries lie in the sea or an estuary these legal limits have been disregarded so that the stated area relates to a physical boundary (i.e. the coastline). However, the areas shown include all smaller islands which form part of the State.

Area of Local Government Areas, Statistical Divisions, and Sub-divisions (a)
(Square Kilometres)

<i>Local government area (statistical division and sub-division in bold type)</i>	<i>Area</i>	<i>Local government area (statistical division and sub-division in bold type)</i>	<i>Area</i>
Hobart (b) (H)	(c)80	Campbell Town	1 440
Glenorchy (b) (H)	(c)120	Fingal	2 730
Clarence (H)	250	Flinders	1 990
Brighton (H) (S)	440	Portland	1 580
Kingborough (H) (S)	350	Ringarooma	1 630
New Norfolk (H) (S)	1 320	Ross	1 240
Sorell (H) (S)	780	Scottsdale	1 290
Bothwell (S)	2 610	North Eastern	11 900
Bruny (S)	360	NORTHERN	20 610
Esperance (S)	6 190	Burnie	620
Glamorgan (S)	1 540	Circular Head	4 920
Green Ponds (S)	420	Devonport (b)	120
Hamilton (S)	5 850	Kentish	1 190
Huon (S)	770	King Island	1 100
Oatlands (S)	1 540	Latrobe	550
Port Cygnet (S)	240	Penguin	430
Richmond (S)	570	Ulverstone	510
Spring Bay (S)	1 120	Wynyard	810
Tasman (S)	480	North Western	10 240
HOBART	940	Gormanston	2 870
SOUTHERN	24 090	Queenstown	140
Launceston (b)	(c)28	Strahan	3 730
Beaconsfield	640	Waratah	2 710
Deloraine	2 920	Zeehan	3 000
Evandale	990	Western	12 460
George Town	650	MERSEY-LYELL	22 700
Lilydale	680	TASMANIA	68 300
Longford	1 000		
St Leonards	890		
Westbury	900		
Tamar	8 700		

(a) See Chapter 2 for a description of Divisions and Sub-divisions.

(b) City.

(c) To nearest square kilometre.

At the 1966 Population Census, new definitions based on high population density were employed to fix the boundaries of urban areas. The two major centres in the State at the

1971 Population Census, with boundaries conforming to the definitions, were: (i) Urban Hobart (approximately 112 square kilometres); and (ii) Urban Launceston (approximately 74 square kilometres). (See Chapter 6 for definitions of these areas.)

FINANCE

Introduction

For local government purposes Tasmania is divided into 49 areas, comprising 45 municipalities and the cities of Hobart, Launceston, Glenorchy and Devonport. There are no unincorporated areas.

The term 'local government' is employed only in relation to the municipalities and city corporations. Details of semi-government authorities concerned with water supply appear in a later section of this chapter; such authorities provide bulk water but reticulation and sale to householders remain local government functions. Since 1961 the Metropolitan Water Board has incurred loan debts which, under earlier arrangements, would have been entered as the water loan debts of Hobart, Glenorchy, Clarence and Kingborough local government authorities.

Local government finance statistics in Tasmania are compiled by the Australian Bureau of Statistics from annual local government accounts. Under section 329 of the *Local Government Act* 1962 each local government authority has to submit its accounts annually to the Auditor-General. Copies of these accounts are also made available to the ABS.

During 1979-80 the ABS introduced a System of Standardised Local Government Finance Statistics (SLGFS) to enable the production of uniform statistics for all local government authorities in Australia. Owing to changes in definitions of items due to the introduction of the SLGFS, the following financial statistics are not comparable with those in issues of the *Year Book* prior to 1981.

Ordinary Services

Revenue and Loan Receipt

The largest proportion of local government revenue comes from rates (48.6 per cent in 1980-81) which are direct charges on owners of property. After rates, the next most important sources of revenue are: (i) government and semi-government grants; (ii) charges for public works and services; and (iii) loan raisings. The following table shows the revenue and loan receipts of the Tasmanian municipalities and cities for 1980-81.

Local Government Authorities, Tasmania
Ordinary Services—Revenue and Loan Receipts, 1980-81
(\$'000)

Category	Amount	Per cent of total
Revenue		
Rates (including penalties)	38 619	44.8
Licences, fees and fines	1 619	1.9
Charges	10 253	11.9
Interest received	4 356	5.1
Transfers from trading activities	159	0.2
Government grants—General purpose	9 624	11.1
Specific: capital	5 026	5.8
Specific: current	3 009	3.5
Other Revenue	5 770	6.7
Total Revenue	78 435	91.0

continued next page

Local Government Authorities, Tasmania
Ordinary Services—Revenue and Loan Receipts, 1980-81
 (\$'000)—*continued*

<i>Category</i>	<i>Amount</i>	<i>Per cent of total</i>
Loan Receipts		
From—Commonwealth and State Governments	242	0.3
Other lenders	7 580	8.8
Total loan receipts	7 822	9.1
Total revenue and loan receipts	86 256	100.0

Outlay

The following table summarises the outlay of the Tasmanian municipalities and cities for 1980-81:

Local Government Authorities, Tasmania
Ordinary Services—Outlay (a), 1980-81
 (\$'000)

<i>Category</i>	<i>Amount</i>
Outlay on goods, services and land	
Capital—Land and fixed assets	24 183
Current	48 704
Total outlay on goods, services and land	72 887
Debt charges—Interest paid	7 707
Debt redemption	5 344
Levies paid to Governments	1 782
Donations paid	293
Other (b)	745
Total outlay	88 758

(a) Comprises outlay from revenue and loans.

(b) Advances to public and transfers to trading activities.

The following table shows the outlay on goods, services and land classified by purpose category of expenditure and whether capital or current:

Local Government Authorities, Tasmania
Ordinary Services Outlay on Goods, Services and Land
by Purpose (a), 1980-81
 (\$'000)

<i>Category</i>	<i>Current</i>	<i>Outlay Capital</i>	<i>Total</i>
General administration	14 697	1 132	15 829
Law, order and public safety	398	72	470
Education, health, welfare and housing	1 859	595	2 454
Protection of the environment	3 157	1 049	4 206
Community and regional development	349	206	555
Other community amenities	716	124	840
Public halls and civic centres	1 125	1 968	3 094
Recreation and culture	7 731	2 674	10 405
Roads and bridges	15 504	11 680	27 184
Street lighting	1 259	14	1 273
Plant purchases n.e.c.	—	2 531	2 531
Other outlay	1 909	2 139	4 049
Total outlay	48 704	24 183	72 887

(a) Comprises outlay from revenue and loans.

Rates

Under the *Local Government Act* 1962, rates may be based on assessed annual value (i.e. the gross annual income, at the time of valuation, that the person owning the land might obtain by letting the land and its fixtures to a tenant), unimproved value (i.e. value of land only), the capital value (i.e. value of land plus improvements), or upon a composite value incorporating the unimproved value plus some arbitrary proportion of the value of improvements.

In Tasmania, it has been usual for rates to be based on annual values despite isolated and unsuccessful campaigns in favour of taxing on unimproved value only. In estimating annual value, the valuer is taking into account not only the land but also the improvements (e.g. buildings) so there is, in fact, a close relationship between movements in the total capital value of any property and movements in its assessed annual value. The *Land Valuation Act* 1971 consolidated and amended the law relating to land valuation.

System of Valuation

The valuation of property is carried out by a State Government authority, the Land Valuation Branch. Its valuations form the basis of two distinct taxes: (i) land tax collected by the State; and (ii) rates collected by local government authorities on the basis of assessed annual values.

Until 1975-76, land tax was based on the unimproved value of land. The *Land Valuation Act* 1971 set up the mechanism by which the basis could be changed to 'land value', being the capital value of the land in its present state but excluding the value of buildings and other artificially established improvements. For a complete definition of 'land value', reference should be made to the Act.

Since it is impossible to completely revalue all properties within the State in the course of a single year, revaluation is carried out on a rotational basis, e.g. St Leonards, New Norfolk and Lilydale were valued in 1971 and again in 1976.

Tasmania is the only state which uses the *assessed annual value* system of rating properties in all local government areas. In New South Wales and Queensland, site value rating is used almost exclusively and the majority of all local government authorities in Australia make use of the site value of property in determining at least part of their rates. Under site value rating, rates are based on the site (unimproved land) value of properties only, whereas under the assessed annual value system of rating, rates are based on a notional earning capacity of properties.

The following table shows the total value of all properties for local authorities:

Value of Properties: Local Government Authorities

Local Government Authority	Year of revaluation (a)	Land Value	Capital Value	Assessed Annual Value
Beaconsfield	1979	71 705 500	205 123 700	11 357 058
Bothwell	1977	11 147 150	23 355 600	980 902
Brighton	1978	42 594 800	118 278 500	6 039 694
Bruny	1980	9 237 100	15 620 275	641 164
Burnie	1980	111 178 686	355 982 420	23 512 992
Campbell Town	1977	12 265 970	25 861 250	1 258 008
Circular Head	1978	34 126 030	92 064 700	4 673 686
Clarence	1979	201 755 670	627 122 550	38 109 544
Deloraine	1981	43 068 900	93 765 000	4 629 586
Devonport	1977	84 757 968	320 791 470	19 431 886
Esperance	1978	11 230 825	37 185 800	1 765 546
Evandale	1977	15 504 850	38 443 600	2 004 192
Fingal	1979	13 981 620	32 976 400	1 726 900
Flinders	1978	9 887 050	20 768 050	954 772
George Town	1977	23 363 180	112 597 685	7 028 576
Glamorgan	1980	19 200 465	44 586 510	2 221 160
Glenorchy	1978	188 690 370	614 496 610	41 740 008
Gormanston	1981	70 595	221 540	43 076

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Value of Properties: Local Government Authorities—continued

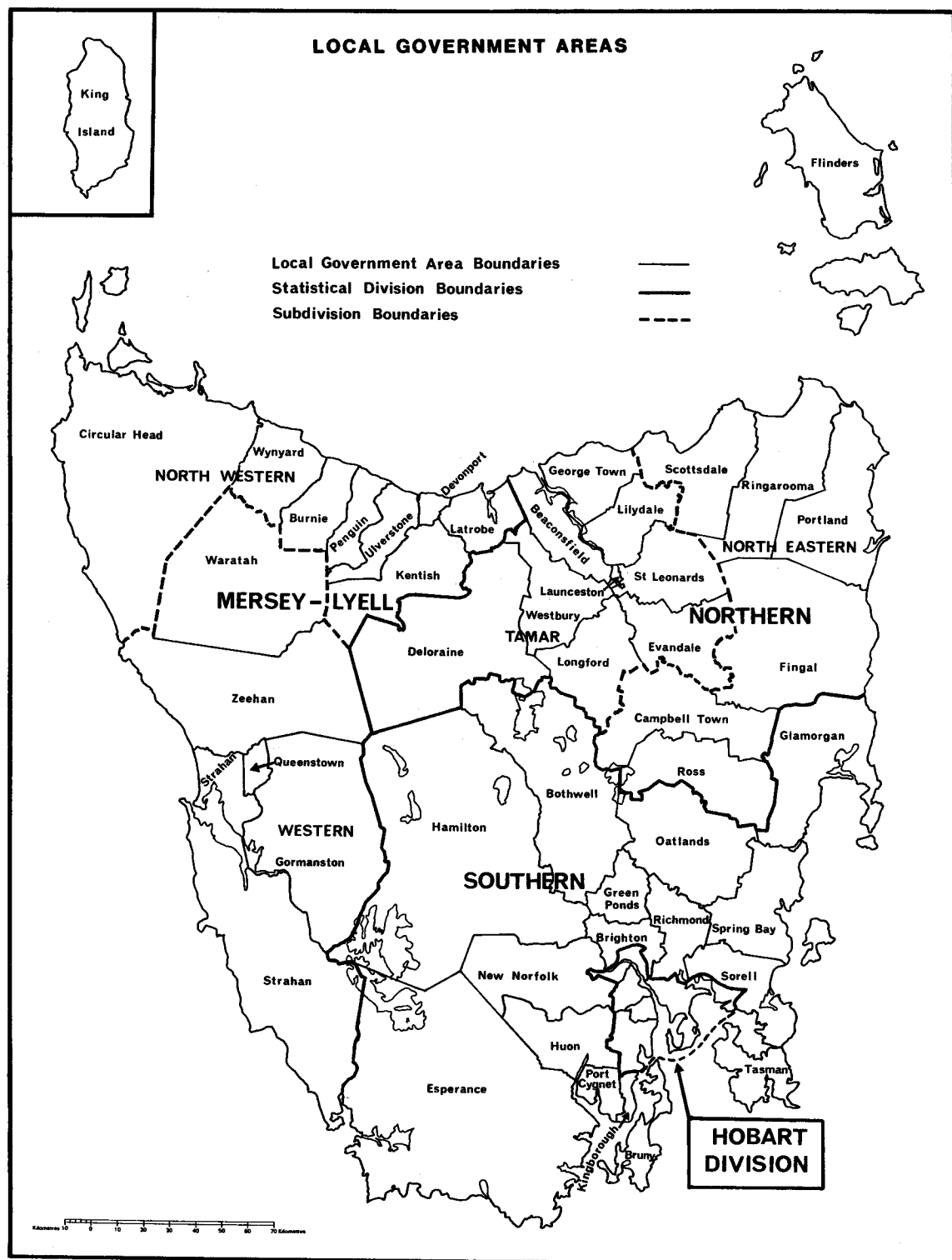
Local Government Authority	Year of revaluation (a)	Land Value	Capital Value	Assessed Annual Value
Green Ponds	1980	11 466 550	22 543 050	981 170
Hamilton	1977	15 702 400	33 205 650	1 527 127
Hobart	1979	380 512 067	1 317 912 686	86 570 972
Huon	1980	20 769 500	61 784 600	3 156 016
Kentish	1978	21 806 300	52 288 300	2 528 458
Kingborough	1977	96 798 350	270 785 600	14 226 600
King Island	1981	17 536 730	47 897 310	2 438 120
Latrobe	1981	57 028 700	131 951 050	7 073 266
Launceston	1980	202 204 548	644 681 450	52 126 810
Lilydale	1981	51 261 850	148 174 550	9 037 488
Longford	1979	38 235 300	93 234 630	5 053 226
New Norfolk	1981	42 716 510	157 593 800	9 545 592
Oatlands	1981	42 914 300	80 163 450	3 388 522
Penguin	1979	21 007 810	61 182 010	3 147 502
Port Cygnet	1981	16 659 285	37 283 390	1 771 886
Portland	1978	16 212 750	41 415 000	2 210 738
Queenstown	1981	1 911 725	27 161 995	2 378 702
Richmond	1980	21 556 260	42 873 920	1 919 682
Ringarooma	1978	10 248 960	23 701 305	1 179 682
Ross	1977	7 968 550	14 304 750	622 292
St Leonards	1981	78 927 650	270 460 500	18 570 016
Scottsdale	1977	21 515 685	61 966 400	3 130 962
Sorell	1977	33 597 450	90 041 540	4 444 046
Spring Bay	1980	15 680 875	43 877 915	2 179 564
Strahan	1981	956 630	5 136 250	351 744
Tasman	1981	13 224 800	31 041 400	1 367 650
Ulverstone	1979	64 507 812	183 929 250	10 190 196
Waratah	1981	2 056 922	20 158 992	1 322 164
Westbury	1978	33 110 700	89 045 150	4 933 716
Wynyard	1977	41 307 470	122 593 300	6 491 780
Zeehan	1981	5 817 520	47 636 170	3 479 022
Total		2 308 988 688	7 055 267 023	435 463 461

(a) Latest revaluation effective from 1 July of year shown.

The table that follows shows the value of property in Tasmania for recent years:

Total Property Valuation of All Local Government Areas, Tasmania at 1 July
(\$ Million)

Year	Total capital value	Unim- proved value	Assessed annual value	Land value	Year	Total capital value	Unim- proved value	Assessed annual value	Land value
1976	2 902.51	763.67	185.36	n.a.	1979	5 678.18	n.a.	344.62	1 865.19
1977	3 531.99	n.a.	218.86	1 155.61	1980	6 448.32	n.a.	397.69	2 092.20
1978	4 241.72	n.a.	260.11	1 401.17	1981	7 055.27	n.a.	435.46	2 308.99



Rate Collections

The following table shows details of the rates collected in Tasmania for the latest three-year period available:

Rates Received by Local Government Authorities, Tasmania
(**\$'000**)

<i>Rate</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Ordinary services	32 734	34 721	37 319	38 619
Business undertakings—				
Water	9 582	11 721	13 566	15 190
Sewerage	8 033	9 597	11 230	12 403
Total	17 615	21 318	24 796	27 593
Grand total	50 349	56 039	62 114	66 213
Percentage increase (a)	8.8	11.3	10.8	6.6

(a) Over previous year.

Grants to Local Government*Background*

In recent years, major developments have occurred in relation to the finances of local government in Australia. The combination of rate structures reaching 'saturation' levels and rising costs of operation, together with increased responsibilities for facilities in areas such as recreation, health, roads, water and sewerage, etc., has led local government throughout Australia to press for general revenue grants from governments to supplement revenue raised from rates. This demand has arisen despite the increasing assistance given in the form of specific purpose grants from both State and Federal Governments.

In 1973 the Commonwealth Parliament passed the *Grants Commission Act 1973* repealing the *Commonwealth Grants Commission Act 1933*. The 1973 Act laid down procedures for local government authorities to apply for financial assistance from the Commonwealth and for such applications to be the subject of inquiry and report by the Grants Commission. It also provided that the grants to the states for local authorities should be provided in such a way as to promote financial equality between local authorities and regional groupings of such authorities.

These arrangements were replaced in 1976 by the tax sharing arrangements described below, and the Grants Commission ceased to be responsible for recommending amounts to be paid to specific local authorities (*Commonwealth Grants Commission Act 1976*).

Local Government Assistance Under The Tax Sharing Arrangements

The arrangements agreed to in 1976 between the Commonwealth and the states for the sharing of personal income tax collections with local government, and subsequently incorporated in the *Local Government (Personal Income Tax Sharing) Act 1976*, are broadly as follows:

- (i) each year local government in the states will be entitled to a fixed percentage of net personal income tax collections in the previous year;
- (ii) the amount so derived will be divided among the states in specified proportions which are subject to recommendation by the Commonwealth Grants Commission;
- (iii) each state will allocate a minimum of 30 per cent of the assistance among local authorities on a basis which takes into account the respective populations of those local authorities, but which may also take into account the respective sizes and the respective population densities, and any other matters agreed upon between the Commonwealth and the state concerned;
- (iv) the remaining assistance will be allocated among the local authorities, having regard to their respective financial needs, on the recommendation of State Grants Commissions.

In 1979-80 the Act was amended on two occasions. The effect of these amendments was to increase the share of net personal income tax collections allocated to local gov-

ernment in the States from 1.52 per cent to 1.75 per cent of the previous year's collections in 1979-80 and to 2 per cent in 1980-81 at which it has remained.

Conditions of Operation

For 1981-82, the Federal Government allocated \$350.9m to the States for distribution to local governments. The distribution of this amount between the States was made on a percentage basis recommended by the Commonwealth Grants Commission. The following state percentages and amounts were derived under the formula determined by that Commission:

Federal Grants to Local Government, 1981-82

<i>State</i>	<i>Percentage of total</i>	<i>Amount of grant (\$'000)</i>
New South Wales	36.4977	128 058
Victoria	25.4513	89 300
Queensland	16.8606	59 158
Western Australia	9.3897	32 945
South Australia	8.6010	30 178
Tasmania	3.1997	11 227
Total	100.0000	350 866

For 1981-82 30 per cent (\$3.4m) of the Tasmanian allocation (\$11.2m) was distributed on a per head of population basis. The balance (\$7.8m) was distributed by the State Grants Commission as equalisation grants.

Principles for Determining Equalisation Grants

The functions of the State Grants Commission are largely covered by Section 9 of the Act, which sets down certain broad principles to be followed. The fundamental guideline for the determination of grants is set out in Section 9 (2) (d) of the Act. It requires the Commission to ensure that, as far as possible, the grant recommended for a municipality will be an amount which, providing it makes a reasonable rating effort, will enable it to provide services at about the same standard as other municipalities of a similar type. This is viewed as the principle of relative financial need. In determining the grants necessary to equalise the fiscal capacity of municipalities, the Commission has adopted the principle that a grant must basically reflect differences between:

- (i) the revenue-raising capacity of municipalities; and
- (ii) the relative cost of providing services (expenditure differentials).

The Commission has adopted methods to identify and measure those factors which affect relative rateable capacity and the cost of functioning at a given standard. To the extent to which a municipality is below the standard or faced with higher costs, a *prima facie* case exists for an equalisation component.

For 1976-77 the Commission decided that an equal allocation should be made between revenue and expenditure components but, in so doing, included the 'per capita' element (30 per cent) of the funds in the revenue component. The Commission, in 1977-78, re-examined this basis of allocation and came to the conclusion that, overall, it tended to unduly favour larger municipalities. It is now leaning to the view that allocation to revenue and expenditure components should be equal within the amount available for equalisation grants. In order that the impact on any municipality should not be too great, the Commission decided to go only part of the way in 1977-78, 38.4 per cent being for revenue inequalities, and 61.6 per cent for expenditure inequalities. This trend was continued in 1978-79, the allocations for revenue and expenditure inequalities being 45 and 55 per cent respectively. The Commission deferred a further move to a 50-50 basis in 1979-80 and retained 45 and 55 per cent allocations for revenue and expenditure inequalities respectively. For 1980-81 and 1981-82 a 50-50 basis for allocations was adopted. The next table shows the allocation of federal grants to revenue and expenditure components and the per capita grants portion for the last three years:

**Federal Financial Assistance Grants to Local Government, Tasmania
(\$'000)**

<i>Allocation</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>
Equalisation grants—				
Revenue disabilities	1 809	2 235	3 368	3 929
Expenditure disabilities	2 210	2 731	3 368	3 929
Total	4 019	4 966	6 737	7 859
Per capita grant	1 722	2 128	2 887	3 368
Total grant	5 741	7 095	9 624	11 227

The Commonwealth Grants Commission's only role under the new scheme is to advise of the appropriate percentage distribution of federal personal income tax between the states, and, in the initial period, to provide advice to the state bodies on methods for calculating grants to municipalities.

Financial Assistance by Grants Commission

The following table provides details of financial assistance to Tasmanian municipalities from distributions under the revised scheme for 1979-80 and 1980-81.

Federal Government Financial Assistance to Local Government in Tasmania (a)

<i>Local government area</i>	<i>1980-81</i>				<i>1981-82</i>			
	<i>Per capita grant</i>	<i>Equalisation grant</i>	<i>Total grant</i>	<i>Per head of population (b)</i>	<i>Per capita grant</i>	<i>Equalisation grant</i>	<i>Total grant</i>	<i>Per head of population (b)</i>
	<i>\$'000</i>	<i>\$'000</i>	<i>\$'000</i>	<i>\$</i>	<i>\$'000</i>	<i>\$'000</i>	<i>\$'000</i>	<i>\$</i>
Beaconsfield	94	190	284	20.41	111	223	334	23.61
Bothwell	6	53	59	73.34	6	63	69	93.76
Brighton	49	130	179	21.68	66	152	218	22.62
Bruny	2	32	34	106.92	3	38	41	103.98
Burnie	135	270	405	20.45	158	315	473	23.28
Campbell Town	11	50	61	39.22	12	59	71	46.95
Circular Head	54	200	254	32.64	62	238	300	37.83
Clarence	309	550	859	19.06	360	648	1 008	22.08
Deloraine	33	113	146	29.90	39	133	172	33.94
Devonport	155	315	470	20.43	183	365	548	23.09
Esperance	22	95	117	36.92	25	115	140	43.95
Evandale	12	50	62	34.62	14	59	73	37.01
Fingal	20	105	125	43.11	23	123	146	49.51
Flinders	7	75	82	81.78	8	90	98	88.27
George Town	50	110	160	21.72	59	128	187	25.59
Glamorgan	9	58	67	48.55	12	68	79	48.90
Glenorchy	294	425	719	16.97	338	496	834	19.90
Gormanston	2	25	27	108.03	2	29	31	238.42
Green Ponds	6	37	43	48.03	7	44	51	51.18
Hamilton	20	105	125	44.07	23	123	146	57.54
Hobart	342	362	704	14.37	391	392	783	16.44
Huon	34	120	154	31.14	39	143	182	37.38
Kentish	27	120	147	37.02	32	140	172	39.85
King Island	19	100	119	43.91	22	118	140	51.49
Kingborough	112	200	312	18.70	133	239	372	21.16
Latrobe	40	100	140	23.66	47	117	164	29.32
Launceston	224	315	539	16.69	258	355	613	19.29
Lilydale	62	165	227	24.82	73	193	266	29.46
Longford	39	90	129	22.64	45	104	149	25.62
New Norfolk	71	155	226	21.90	82	180	262	26.89
Oatlands	15	90	105	47.83	18	105	123	58.35
Penguin	36	97	133	25.41	42	113	155	29.15
Port Cygnet	14	75	89	42.60	17	90	107	46.41

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Federal Government Financial Assistance to Local Government in Tasmania (a)—continued

Local government area	1980-81				1981-82			
	Per capita grant	Equalisation grant	Total grant	Per head of population (b)	Per capita grant	Equalisation grant	Total grant	Per head of population (b)
	\$'000	\$'000	\$'000	\$	\$'000	\$'000	\$'000	\$
Portland	12	60	72	39.48	15	70	85	39.35
Queenstown	29	140	169	40.38	33	165	198	52.19
Richmond	12	70	82	46.84	14	82	96	51.31
Ringarooma	15	95	110	49.71	18	111	129	55.72
Ross	4	40	44	78.23	4	47	51	93.57
St Leonards	136	275	411	20.52	160	321	481	23.09
Scottsdale	29	110	139	33.06	33	129	162	37.60
Sorell	33	130	163	32.93	39	153	192	35.51
Spring Bay	13	70	83	44.68	15	82	97	48.62
Strahan	3	35	38	90.42	3	42	45	105.46
Tasman	6	55	61	66.06	7	65	72	67.05
Ulverstone	89	185	274	20.93	104	216	320	24.46
Waratah	15	75	90	40.16	18	89	107	49.74
Westbury	41	95	136	22.29	49	110	159	23.49
Wynyard	84	200	284	23.09	98	231	329	27.33
Zeehan	41	125	166	27.16	49	148	197	29.36
Tasmania	2 887	6 737	9 624	22.76	3 368	7 859	11 227	26.27

(a) Excludes grants for specific purposes. Comprises: (i) grants to municipalities on a population basis; and (ii) equalisation grants as determined by the State Grants Commission.

(b) Figures are based on the populations of the municipalities at the beginning of each year.

Trading Activities

The classification 'trading activities' is used in Australian local government finance statistics to include municipal tram and bus services, municipal electricity supply (generation or distribution), municipal water and sewerage schemes, municipal abattoirs, etc. In Tasmanian local government finance statistics, electricity supply ceased to appear as from 1948-49 (the Hydro-Electric Commission is now the sole supplier). Municipal tram and bus services ceased to appear as an item in 1955-56 when the Metropolitan Transport Trust acquired the city transport services operating in Hobart, Launceston and Burnie. Consequently, the only activities under the heading of municipal 'business undertakings' in current Tasmanian statistics relate to water supply, sewerage and abattoirs.

The next table shows both current and capital transactions for the trading activities of all local government authorities:

Local Government Authorities, Tasmania: Trading Activities, 1980-81 (\$'000)

Particulars	Water	Sewerage	Abattoirs	Total
Current transactions				
Current income				
Rates	15 190	12 403	—	27 593
Grants	6 406	519	—	6 924
Other (a)	1 941	1 278	285	3 503
Total	23 537	14 199	285	38 021
Current outlay				
Working expenses (b)	8 889	5 737	208	14 834
Interest paid	1 517	5 194	—	6 711
Other (c)	10 684	102	24	10 810
Total	21 089	11 034	232	32 355

continued next page

Local Government Authorities, Tasmania: Trading Activities, 1980-81
(\$'000)—continued

<i>Particulars</i>	<i>Water</i>	<i>Sewerage</i>	<i>Abattoirs</i>	<i>Total</i>
Surplus or deficit (—)	2 448	3 166	53	5 666
Capital transactions				
Source of funds				
Loans	1 765	6 801	—	8 566
Grants	1 646	122	—	1 768
Reimbursements	373	429	—	801
Other (d)	1 867	877	—	2 744
Total	5 650	8 229	—	13 879
Use of funds				
Land and fixed assets	4 589	6 457	—	11 046
Debt redemption	1 061	1 687	—	2 748
Other (e)	—	85	—	85
Total	5 650	8 229	—	13 879

(a) Comprises sales and charges, interest received, and transfers from ordinary services.

(b) Include wages and salaries, purchase of goods and services, pay-roll tax and depreciation.

(c) Levies paid to government and semi-government authorities and transfers to ordinary services.

(d) Depreciation allowances, contributions and donations received, advances repaid by public, sales of land and other fixed assets, surplus on current account, reduction in bank balances, etc. A negative amount can arise when, for example, there has been an increase in bank balances (e.g. as a result of loan moneys raised but not yet spent).

(e) Increase in stocks and advances to public.

Loan Receipts

At 30 June 1981 the aggregate loan debt of all local government authorities was \$165 831 700 of which only \$11 957 800 (i.e. 7.2 per cent) was owed to the Commonwealth and State Governments. The main Tasmanian sources of loans for local government authorities are banks, superannuation and various trust funds, and insurance companies. The cities of Hobart and Launceston also raise loans by public issues.

The next table shows the loan account receipts of all local government authorities:

Local Government Authorities, Tasmania: Loan Raisings
(\$'000)

<i>Particulars</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Loan raisings for—					
Sewerage	6 894	5 395	4 897	4 352	6 801
Water Supply	2 037	769	1 796	1 383	1 765
Ordinary services	8 953	12 350	13 179	9 342	7 822
Total raisings	17 885	18 514	19 872	15 077	16 388

The amount that any local government authority can raise is governed by:

- (i) The difficulty in finding willing lenders.
- (ii) The fact that the approval of the State Treasury is required.
- (iii) The ability of an authority to repay its debt. The *Local Government Act* 1962 restricts the total indebtedness of an authority to 10 times its average annual income for the preceding three financial years.

The following table shows, in summary form, loan raisings and loan debt:

**Local Government Authorities, Tasmania: Loan Raisings and Loan Debt
(\$'000)**

Year	Loan raisings during financial year	Loan debt at 30 June		
		To State and Commonwealth Government	To other creditors	Total
1976-77	17 885	4 973	117 977	122 950
1977-78	18 514	6 556	129 729	136 285
1978-79	19 872	9 563	140 370	149 934
1979-80	15 077	12 105	145 195	157 300
1980-81	16 388	11 958	153 874	165 832

Source of Loan Funds

It can be seen from the preceding table that the local government loan debt includes only a small liability in respect of advances made by the State Treasury. However, the proportion of total debt owed to the State Government increased in recent years due to arrangements under the National Sewerage Program, whereby the Federal Government made advances to the State. These funds were then loaned by the State Government to local government authorities. This scheme was phased out at the end of 1976-77.

Instalment Debentures

Much of the debt of the municipalities is in the form of instalment debentures which involve equal periodic payments (usually half-yearly); such payments are allocated to redemption and interest in changing proportions as the loan approaches maturity.

Water and Sewerage Connections

The following table shows the number of properties in each local government area which are connected to water and sewerage schemes.

Details are those reported by local government authorities for schemes which are their responsibility (e.g. some mining towns are excluded) and relate broadly to the number of properties, whether residential or not, connected to mains. A uniform definition of a property connected has not, however, been used by all authorities (e.g. differences can occur where several properties are served by one connection or conversely where there are several connections to one property). Care should therefore be used in comparing details for different local government areas.

**Number of Properties in each Local Government Area Connected to Water and Sewerage Schemes at
30 June, 1981**

Local government area	Water	Sewerage
Beaconsfield	4 392	3 185
Bothwell	148	—
Brighton	1 973	1 808
Bruny	—	—
Burnie	5 711	6 154
Campbell Town	361	320
Circular Head	1 544	860
Clarence	12 897	11 708
Deloraine	883	640
Devonport	8 383	8 252
Esperance	1 081	208
Evandale	578	304
Fingal	938	—
Flinders	121	—
George Town	2 189	1 812
Glamorgan	746	—

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**Number of Properties in each Local Government Area Connected to Water and Sewerage Schemes at
30 June, 1981—continued**

<i>Local government area</i>	<i>Water</i>	<i>Sewerage</i>
Glenorchy	13 338	13 395
Gormanston	60	—
Green Ponds	162	142
Hamilton	184	—
Hobart	18 097	16 070
Huon	1 049	265
Kentish	655	526
King Island	323	316
Kingborough	4 894	3 869
Latrobe	1 364	788
Launceston	14 704	14 752
Lilydale	2 403	2 108
Longford	1 490	1 130
New Norfolk	2 256	1 997
Oatlands	379	242
Penguin	1 369	1 020
Port Cygnet	425	—
Portland	1 180	402
Queenstown	1 322	1 322
Richmond	396	299
Ringarooma	566	—
Ross	153	66
St Leonards	6 345	6 128
Scottsdale	1 689	1 282
Sorell	927	932
Spring Bay	689	247
Strahan	246	5
Tasman	—	—
Ulverstone	3 940	3 522
Waratah	—	—
Westbury	1 468	1 065
Wynyard	2 772	2 496
Zeehan	1 281	1 148
Tasmania	128 071	110 785

Employees of Local Government Authorities

The following table shows total employees of local government authorities over a six-year period. The number of employees of individual authorities ranges from one to over 500 persons.

Local Government Authorities, Tasmania: Persons Employed (a) at 30 June

<i>Particulars</i>	<i>1976</i>	<i>1977</i>	<i>1978</i>	<i>1979</i>	<i>1980</i>	<i>1981</i>
General administration—						
Males	479	506	533	557	590	583
Females	283	277	281	297	292	301
Persons	762	783	814	854	882	884
All other services—						
Males	1 956	2 404	2 304	2 191	2 120	2 017
Females	156	160	184	186	199	205
Persons	2 112	2 564	2 488	2 377	2 319	2 222
Total—						
Males	2 435	2 910	2 837	2 748	2 710	2 600
Females	439	437	465	483	491	506
Persons	2 874	3 347	3 302	3 231	3 201	3 106

(a) Comprises permanent and temporary employees; part-time employees are excluded.

WATER SUPPLY AND SEWERAGE

Water supply and sewerage were once exclusively the responsibility of the cities and municipalities. Three semi-government authorities, the Metropolitan Water Board, the Rivers and Water Supply Commission and the North-West Regional Water Authority, now operate bulk supply schemes, piping water for distribution by the local government authorities in the Hobart, Launceston and North-West areas, and directly to certain industrial consumers. These authorities and their functions are described below.

Metropolitan Water Board

The overall control of water supply in Hobart, Glenorchy, Clarence and Kingborough is vested in the Metropolitan Water Board, but the four local government authorities retain primary responsibility for reticulation to consumers and rating.

The Board has a large pumping station and treatment plant at Bryn Estyn on the Derwent River above New Norfolk and water is supplied from the plant to Hobart's western shore via the West Derwent Pipeline and to the eastern shore suburbs by the Southern Regional Water Supply Scheme. The capacity of these pipelines are 136 megalitres and 27 megalitres per day respectively and constitute the main source of supply available to the Board.

During 1981-82 the Board commenced a major augmentation of the West Derwent Pipeline and Bryn Estyn plant which is expected to be completed in 1984 at a cost of \$25 million.

The Board also directs the operation of bulk supply works vested in the metropolitan municipalities. These include the Lake Fenton Pipeline and Mount Wellington storages in the Hobart and Glenorchy municipalities.

Besides supplying the metropolitan municipalities the Board sells bulk water to major industrial consumers and the rural municipalities of New Norfolk, Brighton, Richmond, Green Ponds and Sorell. Since its inception in 1962 the Board has extended its services to the towns of Cambridge, Midway Point, Sorell, Seven Mile Beach, Lauderdale and Rokeby on the eastern shore, while on the western shore extensions serve Margate, Snug and Howden.

Financial Relationship

Under the *Metropolitan Water Board Act 1961* the four metropolitan local government authorities no longer borrow money for metropolitan water works, but are provided with the necessary capital by the Board. The Board obtains its funds from private lenders and the State Loan Fund, the local authorities in turn being required to make revenue contributions to the Board. The effect of this arrangement can be seen in State local government loan debt tables where the debt in respect of water shows only very minor annual increases; in effect, the expenditure of the four metropolitan local government authorities for water works undertaken since 1961 is reflected in the debt of the Board and not in debts of the municipalities. At 30 June 1982 the loan debt of the Board to the State Treasury was \$17.0 million and to other lenders \$21.0 million.

The financial relationship between the Board and the four metropolitan local government authorities is summarised in the following table:

Metropolitan Water Board: Income and Expenditure
(\$'000)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82
<i>Income</i>					
Municipal contributions—					
Hobart	2 226	2 654	2 924	3 231	3 690
Glenorchy	1 162	1 344	1 398	1 635	1 807
Clarence	1 205	1 345	1 375	1 372	1 448
Kingborough	278	323	351	431	491

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Metropolitan Water Board: Income and Expenditure
(\$'000)—continued

<i>Particulars</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>
<i>Income</i>					
Special consumers	401	529	592	565	693
Direct earnings, Southern Regional Scheme	600	647	914	839	993
Other revenue	222	217	770	1 408	1 558
Total	6 093	7 059	8 324	9 481	10 680
<i>Expenditure</i>					
Reimbursement of working expenses—					
Hobart	911	1 139	1 234	1 424	1 585
Glenorchy	574	525	553	638	673
Clarence	335	362	420	458	509
Kingborough	125	182	193	227	246
Bulk supply, operation costs	1 291	1 220	1 509	1 629	1 836
Administrative expenses	172	193	255	355	394
Interest	2 093	2 259	2 707	3 217	3 437
Depreciation	531	576	806	918	1 001
Superannuation	157	181	181	209	244
Other	—	3	—	—	—
Total	6 189	6 640	7 858	9 075	9 925

The preceding table excludes capital contributions. These are shown in the next table:

**Metropolitan Water Board: Capital Contributions to Southern Local
Government Authorities**
(\$'000)

<i>Particulars</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>
Hobart—						
Construction and improvement	354	503	772	481	624	325
Loan redemption and conversion	37	34	33	35	31	32
Total	391	537	805	516	655	357
Glenorchy—						
Construction and improvement	401	282	177	299	148	481
Loan redemption and conversion	45	42	40	43	43	37
Total	446	325	217	341	191	518
Clarence—						
Construction and improvement	322	140	140	161	181	272
Loan redemption and conversion	50	70	50	47	46	43
Total	372	210	190	208	227	315
Kingborough—						
Construction and improvement	122	219	195	527	218	64
Loan redemption and conversion	10	8	17	6	8	5
Total	132	228	212	533	226	69
Total—						
Construction and improvement	1 199	1 145	1 128	1 468	1 171	1 142
Loan redemption and conversion	142	154	140	131	128	117
Grand total	1 341	1 299	1 424	1 599	1 299	1 259

The Board makes capital contributions to the four local government authorities for: (i) construction and improvement of their water works; and (ii) redemption of their water debt raised prior to creation of the Board. The Board finances these capital contributions by: (i) borrowing from the State Government; (ii) borrowing from the public; and (iii) application of internal funds, e.g. depreciation funds. The cost of servicing loans, raised by the Board to meet local government requirements, is met from revenue contributions by the four local government authorities.

Capital Expenditure

The only major item of expenditure by the Board in 1981-82 was \$4 144 376 for the augmentation of the West Derwent Scheme and this was financed from funds raised by the Board in previous years. Funds raised by the Board for capital purposes in 1981-82 were \$750 000 and this was provided by local external borrowings.

North-West Regional Water Authority

This Authority was constituted under the provisions of the *North-West Regional Water Act 1976* and is vested with the control and management of the water supply undertaking within the North-West Regional Water District.

Since 1 July 1977 all works associated with the storage and distribution of water by the local government authorities of Circular Head, Devonport, Kentish, Latrobe, Penguin, Ulverstone and Wynyard in the constituent water districts have been transferred to and vested in the Authority. The Municipality of Burnie is not included in the water district.

The financial relationship between the Authority and the seven local authorities is summarised in the following tables:

North-West Regional Water Authority: Income and Expenditure
(\$'000)

<i>Particulars</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>
<i>Income</i>			
Municipal contributions—			
Devonport	1 206	1 638	2 219
Ulverstone	481	637	863
Wynyard	340	468	630
Latrobe	165	231	301
Circular Head	194	225	326
Kentish	79	105	140
Penguin	117	163	222
Interest	181	g 144	151
Contribution to loan interest and expenses (a)	—	99	266(a)
Other receipts	—	—	8
Total	2 763	3 710	5 125
<i>Expenditure</i>			
Reimbursement of working expenses—			
Devonport	806	698	733
Ulverstone	214	211	257
Wynyard	153	141	165
Latrobe	96	103	117
Circular Head	157	153	149
Kentish	58	38	38
Penguin	80	85	61
Operating expenses	19	495	819
Administration expenses	104	183	261
Interest	894	1 469	2 090
Depreciation	73	155	182
Total	2 655	3 730	4 874

(a) The Authority has submitted a claim to the Treasury for \$266 400 for reimbursement of additional interest and borrowing charges which it incurred to 30 June 1981 as a result of certain external borrowings.

North-West Regional Water Authority: Capital Contribution to North-West Local Government Authorities (\$'000)

<i>Particulars</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>
Devonport—			
Construction and improvement	185	140	185
Loan redemption and conversion	28	—	—
Total	212	140	185
Ulverstone—			
Construction and improvement	92	65	75
Loan redemption and conversion	—	—	—
Total	92	65	75
Wynyard—			
Construction and improvement	47	37	54
Loan redemption and conversion	—	—	—
Total	47	37	54
Latrobe—			
Construction and improvement	33	114	99
Loan redemption and conversion	—	—	—
Total	33	114	99
Circular Head—			
Construction and improvement	25	20	29
Loan redemption and conversion	—	—	—
Total	25	20	29
Kentish—			
Construction and improvement	18	11	15
Loan redemption and conversion	—	—	—
Total	18	11	15
Penguin—			
Construction and improvement	29	15	20
Loan redemption and conversion	—	—	—
Total	29	15	20
Total—			
Construction and improvement	427	401	477
Loan redemption and conversion	28	—	—
Grand Total	455	401	477

Funds raised by the Authority for capital purposes in 1981-82 totalled \$5 000 000 of which \$1 800 000 was raised from the State Loan Fund, \$1 200 000 by local external borrowings and \$2 000 000 by overseas borrowings.

The main item of capital expenditure during 1981-82 was \$2 562 998 for construction of the Cam Pump Station and Treatment Plant.

Rivers and Water Supply Commission

Introduction

The *Water Act* 1957, proclaimed as from 1 September 1958 conferred on the Rivers and Water Supply Commission all powers which had been previously exercised by the Water, Sewerage and Drainage Board. The Commission exercises a general control over the utilisation of the State's water resources and has specific functions in relation to local

government authority water, sewerage and drainage schemes. It also operates the North Esk Regional Water Supply, West Tamar Water Supply, Prosser River Water Supply, Togari Water Supply, Cressy-Longford Irrigation Scheme, Furneaux Drainage Scheme and Montagu River Improvement Scheme. (Details relating to the Togari Water Supply and Cressy-Longford Irrigation Scheme appear in the chapter 'Land Use and Agriculture'.)

Relations with Local Government Authorities

The Commission examines all proposed municipal water supply and sewerage schemes before construction commences to ensure that the schemes are economically sound. (Schemes proposed by four cities, Hobart, Launceston, Glenorchy and Devonport are exempt from examination by the Commission.) If a scheme is considered to be beyond the financial resources of the local authority, the Commission may recommend to the Minister for Water Resources that a subsidy be paid. Such assistance is payable where investigations show that the revenue which a council might reasonably be expected to raise from rates and other charges is not sufficient to meet the annual loan charges and expenditure on maintenance, operation and administration. In determining the amount of financial assistance payable to any municipality, the Commission takes account of the maximum revenue which that municipality might reasonably be expected to raise from rates and other charges. An annual revenue requirement for each subsidised scheme is determined. This is reviewed from time to time to take account of increases in annual values and of the capacity of ratepayers to contribute to the annual costs of water and sewerage schemes.

Regional Schemes

North Esk Regional Water Supply: This scheme managed by the Commission serves portions of the municipalities of Evandale, George Town, Lilydale, St Leonards and Westbury, as well as providing water for industrial purposes at Bell Bay. Water for this scheme is taken from the North Esk River at Watery Plains and treated at Chimney Saddle where plant capacity is 29.5 megalitres per day. Additional water for the northern part of the scheme is taken from a 12 000 megalitre storage on the Curries River and delivered as settled water to industries at Bell Bay, and following treatment in a 15 megalitre per day plant at Bell Bay to be commissioned early in 1983, treated water will also be supplied from this source. Total income from the scheme during 1981-82 was \$2 136 717 which included sale of water to:

- (i) municipalities \$1 414 169;
- (ii) industrial users \$493 468; and
- (iii) wayside consumers \$24 432.

At 30 June, 1982, capital cost of the scheme amounted to \$13.4 million.

West Tamar Water Supply: This scheme was partially completed by the Beaconsfield Municipality but under the *West Tamar Water Act 1960*, was vested in the Rivers and Water Supply Commission. The Act provided that the scheme should be managed and maintained by the Beaconsfield Council as agent for the Commission. Water for the scheme is drawn from Trevallyn Lake on the South Esk River and can be treated at a rate of 18 megalitres per day. The level of charges is determined by the Commission; Beaconsfield Municipality collects revenue on behalf of the Commission and is reimbursed for expenditure incurred. The scheme serves the western shore of the Tamar located in the Beaconsfield Municipality. Total income from the scheme during 1981-82 was \$786 342 while expenses of the scheme were \$748 580. Capital cost of the scheme to 30th June 1982, was \$3.3 million.

Prosser River Water Supply: This scheme supplies treated water to Orford, Shelley Beach and part of Triabunna in the Spring Bay Municipality. The scheme also supplies water to the Triabunna Woodchip Plant. Capacity of the scheme is 2.5 megalitres per day. Income for the year 1981-82 was \$53 000 while expenses amounted to \$78 000. Capital cost of the Prosser River Scheme amounted to \$436 000.

PLANNING AUTHORITIES

Town and Country Planning

Introduction

Before 1941 governments (both state and federal) had shown little interest in town planning legislation. The war-time Federal Labor Government encouraged activity in this field and in the period 1944-45 four states, including Tasmania, passed legislation with provisions largely based on existing British and New Zealand planning statutes.

Passed in 1944, the Tasmanian *Town and Country Planning Act* applied only to areas which were proclaimed as a result of municipal requests. The Act created the position of Town and Country Planning Commissioner. In 1962 the *Town and Country Planning Act* was repealed and its provisions incorporated in the *Local Government Act* 1962 under which the powers of the Commissioner were broadened so that, with the approval of the Minister, he could require any municipality to prepare a planning scheme. The Commissioner for Town and Country Planning functions as a corporation sole under the *Local Government Act* 1962 and in respect of his statutory powers is responsible to Parliament.

Functions

Briefly, the function of the Commissioner is to approve municipal planning schemes and to certify that subdivision proposals are in accordance with these schemes and meet the other requirements as laid down in the *Local Government Act* 1962. Also the Commissioner may require: (i) any municipality to prepare a planning scheme; or (ii) two or more municipalities to co-operate in the preparation of a master planning scheme; he is empowered to specify the completion date for such schemes. If the municipality fails to comply with the Commissioner's requests, then the Commissioner may prepare a scheme, the municipality meeting all preparation costs. A municipality may voluntarily prepare a planning scheme and submit it to the Commissioner for approval. If a scheme, prepared for an area to which a master plan applies, is submitted to the Commissioner for approval then the Commissioner, before giving a decision, must consult the authority which prepared the master plan. The Commissioner is also empowered to deal with objections to any planning scheme, including master plans prepared by a master planning authority.

Legal Procedure for a Planning Scheme

After the Commissioner gives provisional approval to a planning scheme the municipality must make public the scheme and place a copy in the municipal office for public inspection. Following public notification a three months period is allowed for objections to the scheme by: (i) any owner or occupier of rateable property in the area affected; (ii) health officers as defined in the *Public Health Act* 1962; (iii) the municipality, but only if the scheme has been altered or prepared by the Commissioner. Objections are lodged with the municipality which then forwards the objections, together with a statement of its opinion on them, to the Commissioner for his consideration. The Commissioner hears and determines all the objections except in such cases where he considers the objection sound and the municipality agrees with it. The municipality may request and be entitled to a formal hearing.

If, because of the number and magnitude of objections to a planning scheme, the Commissioner considers it should be substantially modified, he may: (i) recommend that the Minister reject it; or (ii) direct that a specified part of the scheme be revised. In both of these cases another scheme or part scheme has to be prepared and submitted to the Commissioner for provisional approval.

After all objections have been dealt with and the necessary modifications made to the plan, the Commissioner, with the Minister's approval, approves and seals the scheme. The sealed scheme is then publicly notified, placed before both Houses of Parliament and recorded in the central plan register.

Scope of Plan

A town and country planning scheme may deal with the following planning matters: (i) all roads (public and private), streets, footpaths, building lines and land adjacent to

foreshores—the plan should cover both alteration to existing roads, streets, etc. and proposed new roads, streets, etc.; (ii) positioning of buildings and the general nature and design of buildings; (iii) preservation of land for afforestation, recreation and open spaces; (iv) preservation of objects of historical or natural interest; (v) sewerage and drainage; (vi) lighting and water supply systems; (vii) specification of the use to which areas may be put; (viii) provision of amenities; (ix) stages of development; and (x) ancillary or consequential works.

Subdivision Approvals

Except where the Commissioner authorises a council or master planning authority to deal with subdivision plans, all such plans submitted to the council must be forwarded to the Commissioner for approval. (At any time, a council's power to authorise subdivision plans without reference to the Commissioner may be withdrawn by him.) When considering subdivision plans the Commissioner may: (i) call for an amendment that either the council requires or the Commissioner considers the principles of town and country planning demand; or (ii) refuse consent to the council approval. The Commissioner is required to ensure that areas for public use are retained along sea and lake shores and rivers and rivulets.

Planning Appeal Board

The Planning Appeal Board consists of a Chairman, who must be a legal practitioner or barrister, and two other members, at least one of whom must be experienced in town and country planning. Persons affected by the decisions of a local government authority in approving or refusing planning approvals may appeal to the Planning Appeal Board. The Board's determination of an appeal must be given effect to by the municipality. Its decision is conclusive and binds all parties to the appeal. Notices of appeal must be lodged with the Clerk to the Commissioner for Town and Country Planning.

Regional Planning Authorities

There are currently two Regional Planning Authorities, one in the North (the Tamar Regional Master Planning Authority) and one in the North-West (the North-West Master Planning Authority). The Southern Metropolitan Planning Authority disbanded in April 1982.

Sections 740 to 749 of the *Local Government Act 1962* provide for the creation, membership, financial arrangements and statutory duties and responsibilities of regional planning authorities. In general terms the duties and responsibilities of such authorities are to prepare master plans for the whole of the area of its constituent members, and the determination of policies that should be adopted with respect to the use and development of land within the districts of its constituent municipalities having regard to the promotion of the region as an entity in economic, administrative and social terms.

Tamar Regional Master Planning Authority

The Tamar Regional Master Planning Authority was established in September 1969, following a petition to the State Government by the City of Launceston and the municipalities of Beaconsfield, George Town, Lilydale, Longford and St Leonards. Westbury and Evandale, two essentially rural municipalities, became members in April 1974 to complete the membership of the natural region. In 1978, the Port of Launceston Authority became a constituent member.

The Authority consists of three representatives from the Launceston City Council and two from each of the other member authorities. Financial support is given by the constituent councils, in proportion to the annual value of rateable property.

Regional Plan

Initially, a consortium of town planning consultants was engaged to produce a preliminary report which was completed in mid-1971. This report formed the basis for the Regional Plan for the area, which was prepared by the Authority's staff. The aim of the constituent councils in the preparation of the Regional Plan was the unified promotion

and development of the Tamar Valley region. The Plan was prepared under three principal objectives—planning, environmental and promotional.

The planning objective proposed four principal divisions aligned north to south along the Tamar River and South Esk:

- (i) *Northern Tamar*—centred on the port of Bell Bay with the principal theme being the development of industrial potential and port facilities.
- (ii) *Central Tamar*—extending from Moriarty Reach to Dilston; to be promoted as a recreation and tourist area with the preservation of the existing scenic landscape character.
- (iii) *Southern Tamar*—centred upon Launceston with provision for the retention and further development of the City as the commercial and service centre of the region.
- (iv) *Esk Valley*—rationalisation of transport links and industries, and the promotion of the area's intensive agricultural potential.

The major regional planning policies were completed in 1974, and adopted by the constituent councils. During 1975 the final adopted policies were compiled into a strategic planning policy and submitted for Government approval. These policies were again revised in the 'Tamar Region Plan, 1979'.

The current major activities of the Authority concern the preparation of planning schemes and outline development plans for councils. In 1978 the Authority was delegated the task of administering rural subdivision controls by the Town and Country Planning Commissioner. For this and other tasks the authority receives \$60 000 from member authorities and \$30 000 from the State Government. The Authority undertakes major planning studies and is involved in promotion activities, representations and submissions.

Recently completed planning projects include 'Report on the Possible Sites for a Future Pacing Venue', 'Ecclestone Road Outline Development Plan', 'Oil Depot Site Study' and 'George Town-Bell Bay-Low Head Town Planning Scheme — 1982'.

Recent promotion activities, representations and submissions have included the 'Support Yourself — Buy Tamar Made Campaign', 'St. Leonards Velodrome Report', submission for the upgrading of the Launceston Airport and a major industrial sites survey.

(Note: Launceston withdrew from the Authority in February 1983.)

North-West Master Planning Authority

This Authority was constituted in February 1971 in accordance with provisions of the *Local Government Act* 1962. The eight member local government areas are Latrobe, Kentish, Devonport, Ulverstone, Penguin, Wynyard, Circular Head, and Deloraine (Burnie, a foundation member, withdrew in August 1982). Constituent councils each have two members on the Authority. Finance is obtained from member municipalities in proportion to the annual value of rateable property, with a contribution from the State Government in respect of work undertaken for the Town and Country Planning Commission.

Approximately 12 000 square kilometres in area and containing a population of some 97,000, the Authority's sphere of jurisdiction includes two interstate airports, three marine board port facilities, substantial industrial establishments with international markets, one city and nine principal towns, and prime soil districts supporting forestry, livestock and vegetable production.

The fundamental objective of the Authority is to foster, co-ordinate, and promote the development of the region along sound economic and environmental lines. Under State legislation, it has the responsibility to prepare a statutory master plan for the region.

An initial policy adopted by the Authority was to inhibit further linear expansion along the coast and to focus development inwards from the existing urban nodes, with the rural landscape in between serving as punctuating relief. This has been schematically

illustrated in an Outline Development Strategy Map and Report released in November 1974. The Authority has also endorsed the concept of Burnie being the cultural and arts centre for the North-West and West coasts of Tasmania as a regional complement to the major facilities provided in Launceston. In addition, concerted support has been accorded the unique and ambitious 9 000-hectare Dial Regional Sports/Recreation Complex now being implemented in the central location of Penguin.

In 1978 the Authority was delegated the task of administering rural sub-division controls by the Town and Country Planning Commissioner. The Authority is also presently engaged in the promotion of industry, based on the raw materials of the region, and tourism in the area.

Further References

ABS Publications:

Local Government Finance, Tasmania (5501.6), annual.

Australian Municipal Information System (AMIS) Manual (1103.0), irregular, latest issue released in December 1980—this Manual describes the AMIS computer data base system which contains a range of data on a comparable basis for all Australian local government areas. Output from the system is available on request.

Public Authority Finance: State and Local Authorities (5504.0), annual.

Other Publications:

Report of the Auditor-General and the Statement of Public Accounts (published annually by the Tasmanian Government Printer, Hobart).

CHAPTER 6

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Chapter 6

DEMOGRAPHY

POPULATION

Introduction

Population Censuses

Censuses of the population were conducted by the State in 1841, 1847, 1851, 1857, 1861, 1870, 1881, 1891 and 1901; the Australian Statistician became responsible for censuses with the establishment of the Commonwealth Bureau of Census and Statistics (now the Australian Bureau of Statistics) and conducted censuses in 1911, 1921, 1933, 1947, 1954, 1961, 1966, 1971, 1976 and 1981. Some details from the 1981 census of population and housing have been included in this chapter. Further information can be obtained by contacting the Hobart Office of the ABS.

Census Post-Enumeration Surveys

Post-enumeration surveys, designed to measure the degree of error, were conducted after the 1971, 1976 and 1981 censuses. Net under-enumeration (under-count) was derived by comparing results from the Census and post-enumeration survey for the same individuals and identifying omissions and duplications in the Census. Under-enumeration rates for Tasmania and Australia are given below:

Census Under-enumeration Rates			
Area	1971	1976	1981
Tasmania	0.36	1.12	0.97
Australia	1.35	2.71	1.86

Estimated Resident Population

From 30 June 1981 the ABS adopted the 'usual residence' concept as the basis of population estimation. Estimates on this basis are referred to as estimated resident population. Estimated resident population figures have been calculated from 1971 onwards for the State. Resident population for local government areas have been calculated from 1976 onwards.

The estimated resident population for Tasmania in census years is derived from population census counts as follows:

- (a) Census count (actual location) *plus* Tasmanian residents absent interstate *less* interstate visitors to Tasmania *less* overseas visitors *equals* census count, place of usual resident, Tasmania.
(All these are available from the census.)
- (b) Census count, place of usual residence was then adjusted for under-enumeration (determined by the post-enumeration survey) and Tasmanian visitors temporarily overseas added in to give the *estimated resident population* for the State.

Intercensal estimates are prepared by applying vital and migration statistics to census based data. Natural increase (excess of births and deaths) and net migration (excess of arrivals over departures) are applied to the census based estimated resident population to produce an ongoing series. After each census the estimates for the newly completed

intercensal period are revised to adjust for the difference between the new census based result and the comparable estimate.

Comparison With Other States

The following table compares the Tasmanian population at censuses from 1901 with that of other states and territories (full-blood Aboriginals are included from 1966):

Australia: Census Populations of States and Territories (a) (b)
(^{'000 Persons})

State or territory	1901	1933	1947	1954	1966 (b)	1971 (c)	1976 (c)	1981 (c)
NSW	1 355	2 601	2 985	3 424	4 238	4 726	4 960	5 237
Victoria	1 201	1 820	2 055	2 452	3 220	3 601	3 810	3 949
Queensland	498	947	1 106	1 318	1 674	1 852	2 092	2 345
SA	359	581	646	797	1 095	1 200	1 274	1 319
WA	184	439	502	640	848	1 054	1 178	1 299
Tasmania	172	228	257	309	371	398	412	427
NT	5	5	11	17	57	86	98	123
ACT (d)	—	9	17	30	96	151	208	227
Australia	3 774	6 630	7 579	8 987	11 599	13 067	14 033	14 927

(a) Censuses of 1911, 1921 and 1961 are not shown.

(b) Includes full-blood Aboriginals from 1966.

(c) Estimated resident population. Census figures up to 1966 are as recorded.

(d) Part of N.S.W. prior to 1911.

The average annual (compound) increase in population for Tasmania from 1976 to 1981 (based on adjusted population) was 0.72 per cent. The corresponding Australian annual rate of population increase was 1.24 per cent.

Estimated Resident Population

Population in Local Government Areas

The next table shows estimated resident population in local government areas, statistical divisions, sub-divisions and districts for the years 1976-81.

Population in Local Government Areas at 30 June

Local government area								
Statistical Subdivision								Annual rate
Statistical Division		1976 p	1977 p	1978 p	1979 p	1980 p	1981 p	of change (a)
Statistical district								(per cent) p
Hobart	(H)	50 170	49 410	48 880	48 470	47 970	47 620	-1.04
Glenorchy	(H)	43 430	43 340	43 310	42 690	42 100	41 910	-0.71
Clarence	(H)	43 100	43 670	44 170	44 670	45 100	45 620	+1.14
Brighton	(H) (S) ..	5 040	5 700	6 480	7 210	8 420	9 630	+13.83
Kingborough	(H) (S) ..	14 260	15 040	15 840	16 440	17 040	17 570	+4.26
New Norfolk	(H) (S) ..	10 200	10 010	9 870	9 810	9 790	9 760	-0.88
Sorell	(H) (S) ..	4 490	4 570	4 830	4 950	5 150	5 420	+3.84
Bothwell	(S)	800	800	790	770	750	740	-1.55
Bruny	(S)	330	340	350	360	370	390	+3.40
Esperance	(S)	3 240	3 210	3 200	3 160	3 180	3 190	-0.31
Glamorgan	(S)	1 330	1 390	1 450	1 490	1 540	1 610	+3.90
Green Ponds	(S)	850	860	870	950	960	1 000	+3.30
Hamilton	(S)	3 490	3 220	2 920	2 610	2 590	2 530	-6.23
Huon	(S)	4 960	4 930	4 910	4 880	4 870	4 880	-0.32
Oatlands	(S)	2 270	2 250	2 230	2 190	2 170	2 100	-1.54
Port Cygnet	(S)	2 140	2 170	2 220	2 210	2 250	2 300	+1.45
Richmond	(S)	1 710	1 750	1 770	1 770	1 820	1 870	+1.80
Spring Bay	(S)	1 840	1 890	1 910	1 910	1 950	1 990	+1.58
Tasman	(S)	970	990	1 010	1 030	1 050	1 080	+2.17
HOBART STAT DIV		164 320	165 340	166 920	167 870	169 020	170 930	+0.79
SOUTHERN STAT DIV		30 300	30 200	30 090	29 700	30 050	30 280	-0.01

continued next page

Population in Local Government Areas at 30 June—continued

Local government area Statistical Subdivision Statistical Division Statistical district	1976 p	1977 p	1978 p	1979 p	1980 p	1981 p	Annual rate of change (a) (per cent) p
Launceston	33 260	33 240	32 790	32 450	32 440	31 750	-1.14
Beaconsfield	12 950	13 170	13 470	13 640	13 880	14 150	+1.79
Deloraine	4 960	4 960	4 970	4 980	5 020	5 070	+0.44
Evandale	1 620	1 690	1 750	1 810	1 910	1 980	+4.10
George Town	6 760	6 840	6 990	7 060	7 160	7 300	+1.55
Lilydale	8 970	8 970	8 980	8 960	9 000	9 030	+0.13
Longford	5 540	5 570	5 600	5 680	5 760	5 830	+1.03
St Leonards	18 920	19 310	19 600	20 020	20 460	20 820	+1.93
Westbury	5 660	5 770	5 950	6 180	6 490	6 750	+3.59
Tamar Stat Subdivision	99 000	99 520	100 100	100 780	102 120	102 680	+0.73
Campbell Town	1 630	1 620	1 590	1 570	1 540	1 520	-1.39
Fingal	2 980	2 890	2 830	2 860	2 920	2 950	-0.20
Flinders	1 010	1 010	1 010	1 030	1 070	1 110	+1.91
Portland	1 640	1 730	1 810	1 900	2 020	2 150	+5.56
Ringarooma	2 300	2 280	2 260	2 250	2 290	2 310	4P0.09
Ross	580	580	560	560	550	550	-1.06
Scottsdale	4 040	4 110	4 130	4 170	4 250	4 320	+1.35
North Eastern Stat Subdivision	14 180	14 220	14 190	14 340	14 640	14 910	+1.01
NORTHERN STAT DIVISION	113 180	113 740	114 290	115 120	116 760	117 590	+0.77
Burnie	20 090	19 980	19 950	19 950	20 190	20 310	+0.22
Circular Head	7 930	7 900	7 900	7 890	7 920	7 930	..
Devonport	22 190	22 320	22 540	22 760	23 340	23 750	+1.37
Kentish	4 140	4 130	4 150	4 190	4 240	4 310	+0.81
King Island	2 760	2 730	2 730	2 710	2 720	2 710	-0.36
Latrobe	5 540	5 530	5 530	5 530	5 590	5 600	+0.22
Penguin	5 140	5 180	5 220	5 240	5 270	5 310	+0.65
Ulverstone	12 320	12 490	12 570	12 720	12 960	13 090	+1.22
Wynyard	11 640	11 770	11 790	11 880	12 010	12 040	+0.68
North Western Stat Subdivision	91 750	92 030	92 380	92 870	94 240	95 050	+0.71
Gormanstown	390	300	260	230	170	130	-19.73
Queenstown	4 680	4 250	3 820	3 770	3 790	3 800	-4.08
Strahan	460	450	440	440	430	430	-1.34
Waratah	2 020	2 040	2 070	2 120	2 150	2 150	+1.26
Zeehan	5 010	5 340	5 910	6 360	6 650	6 700	+5.99
Western Stat Subdivision	12 560	12 380	12 500	12 920	13 190	13 210	+1.01
MERSEY-LYELL STAT DIVISION	104 310	104 410	104 880	105 790	107 430	108 260	+0.75
Migratory	190	210	220	220	240	240	+4.78
TASMANIA	412 300	413 900	416 400	418 700	423 500	427 300	+0.72
Launceston Statistical District	84 040	84 460	84 890	85 435	86 475	86 810	+0.65
Burnie-Devonport Statistical District (b)	(b)	(b)	(b)	(b)	(b)	72 500	..

(a) Average annual rate of increase (+) or decrease (-) in population over the five year period 1976 to 1981.

(b) Area not delineated prior to the census of 30 June 1981.

Population Distribution

Compared to other parts of the world Tasmania, like the other Australian States, is sparsely populated. Its density of only six persons per square kilometre compares for example with that of England of 356 (June 1980). Although its population of 427 300 is the lowest of all the Australian states, only Victoria and New South Wales have populations more dense than Tasmania. Nevertheless Tasmania, as shown in the table below has the most decentralised population of all the states.

Population Distribution, All States

State	Population		Proportion of total in capital city statistical division
	Total	Capital city statistical division	
	'000	'000	%
NSW	5237.1	3280.9	62.65
Victoria	3948.6	2803.6	71.00
Queensland	2345.3	1086.5	46.32
SA	1319.3	952.7	72.21
WA	1299.1	918.0	70.66
Tasmania	427.3	170.9	40.00

However, as shown in the following table, Tasmania's population is becoming marginally more centralised over time.

Population Distribution Tasmania, 1971-1981

Statistical division	1971 (a)	1976 (b)	1981 (b)
	%	%	%
Hobart	39.24	39.85	40.00
Southern	7.58	7.27	7.09
Northern	27.38	27.45	27.52
Mersey-Lyell	25.56	25.30	25.34

(a) Census figures, as recorded.

(b) Estimated resident population

Age Distribution of the Population

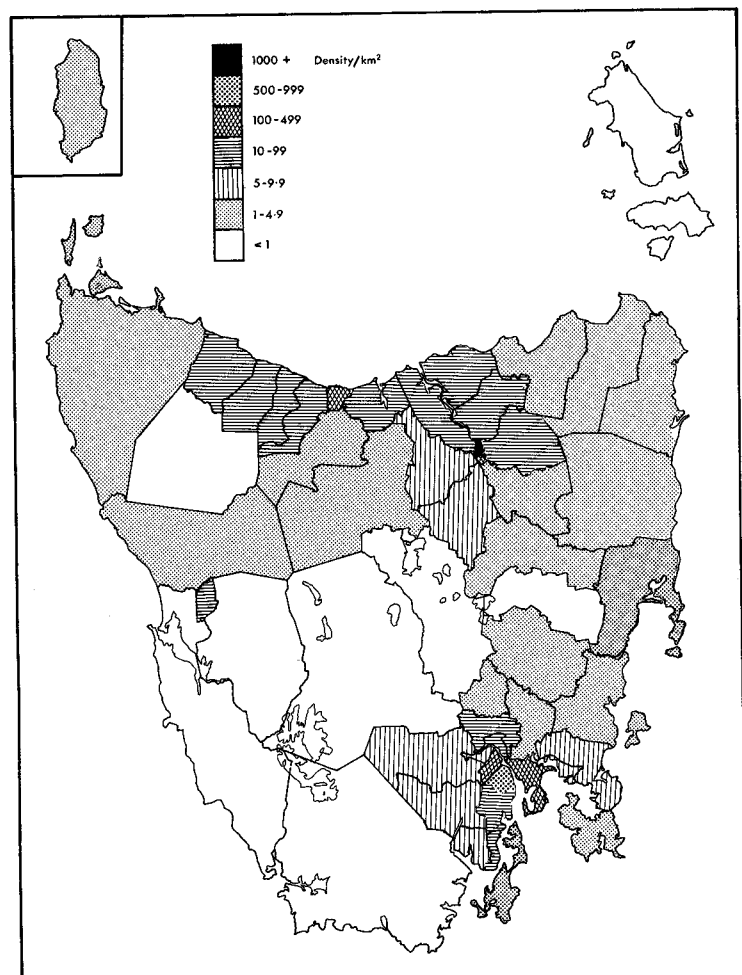
The following table shows the age distribution of the estimated resident population at 30 June 1971, 1976 and 1981:

Age Distribution of the Estimated Resident Population

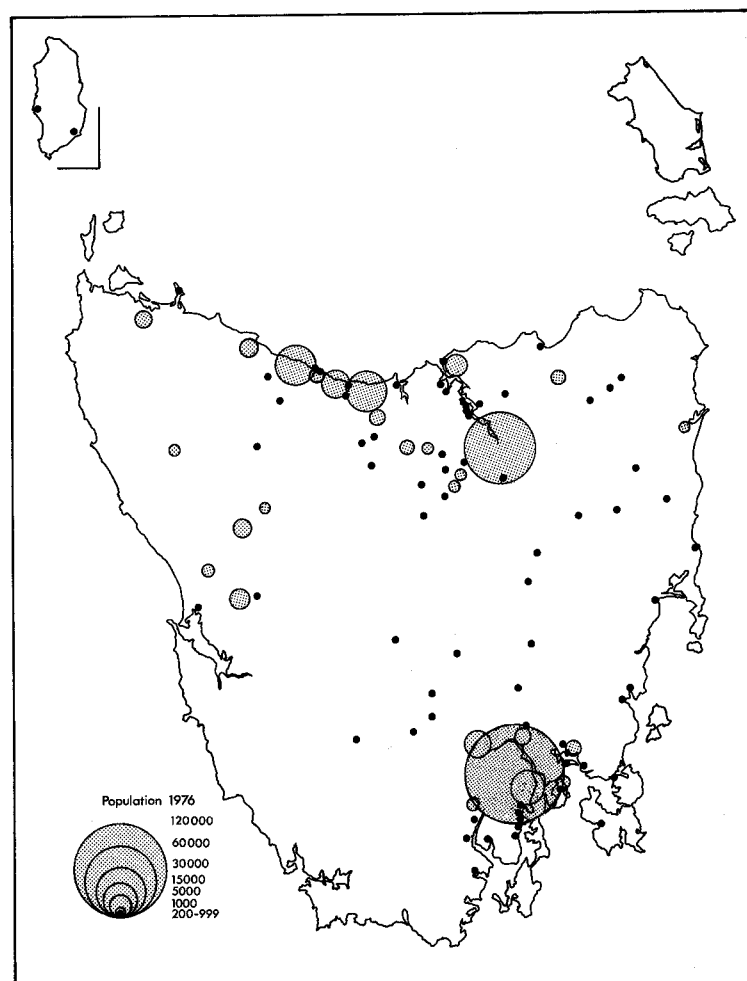
Age (years)	30 June 1971		30 June 1976		30 June 1981			
	Persons	Pro- portion per cent	Persons	Pro- portion per cent	Males	Females	Persons	Pro- portion per cent
0- 4	39 830	10.0	36 920	9.0	17 290	16 700	33 990	8.0
5- 9	40 870	10.3	39 610	9.6	18 920	18 190	37 110	8.7
10-14	42 150	10.6	40 310	9.8	20 180	19 360	39 540	9.3
15-19	36 530	9.2	39 460	9.6	19 600	19 460	39 060	9.1
20-24	32 980	8.3	34 060	8.3	18 660	18 690	37 350	8.7
25-29	26 970	6.8	33 320	8.1	17 380	17 080	34 460	8.1
30-34	23 790	6.0	26 840	6.5	16 880	16 500	33 380	7.8
35-39	21 730	5.5	23 630	5.7	13 520	13 230	26 750	6.3
40-44	23 020	5.8	20 780	5.0	11 790	11 240	23 030	5.4
45-49	23 420	5.9	21 960	5.3	10 190	9 900	20 090	4.7
50-54	20 310	5.1	22 450	5.4	10 890	10 360	21 250	5.0
55-59	18 920	4.8	19 280	4.7	10 330	10 520	20 850	4.9
60-64	15 500	3.9	17 460	4.2	8 570	9 420	17 990	4.2
65-69	11 740	2.9	13 870	3.4	7 530	8 350	15 880	3.7
70+	20 340	5.1	22 350	5.4	10 670	15 900	26 570	6.2
Total	398 100	100.0	412 300	100.0	212 400	214 900	427 300	100.0
18 years and over	252 410	63.4	270 560	65.6	144 440	149 110	293 550	68.7
Pensionable age (a)	39 960	10.0	45 119	10.9	18 200	33 680	51 880	12.1

(a) Males 65 years and over. Females 60 years and over.

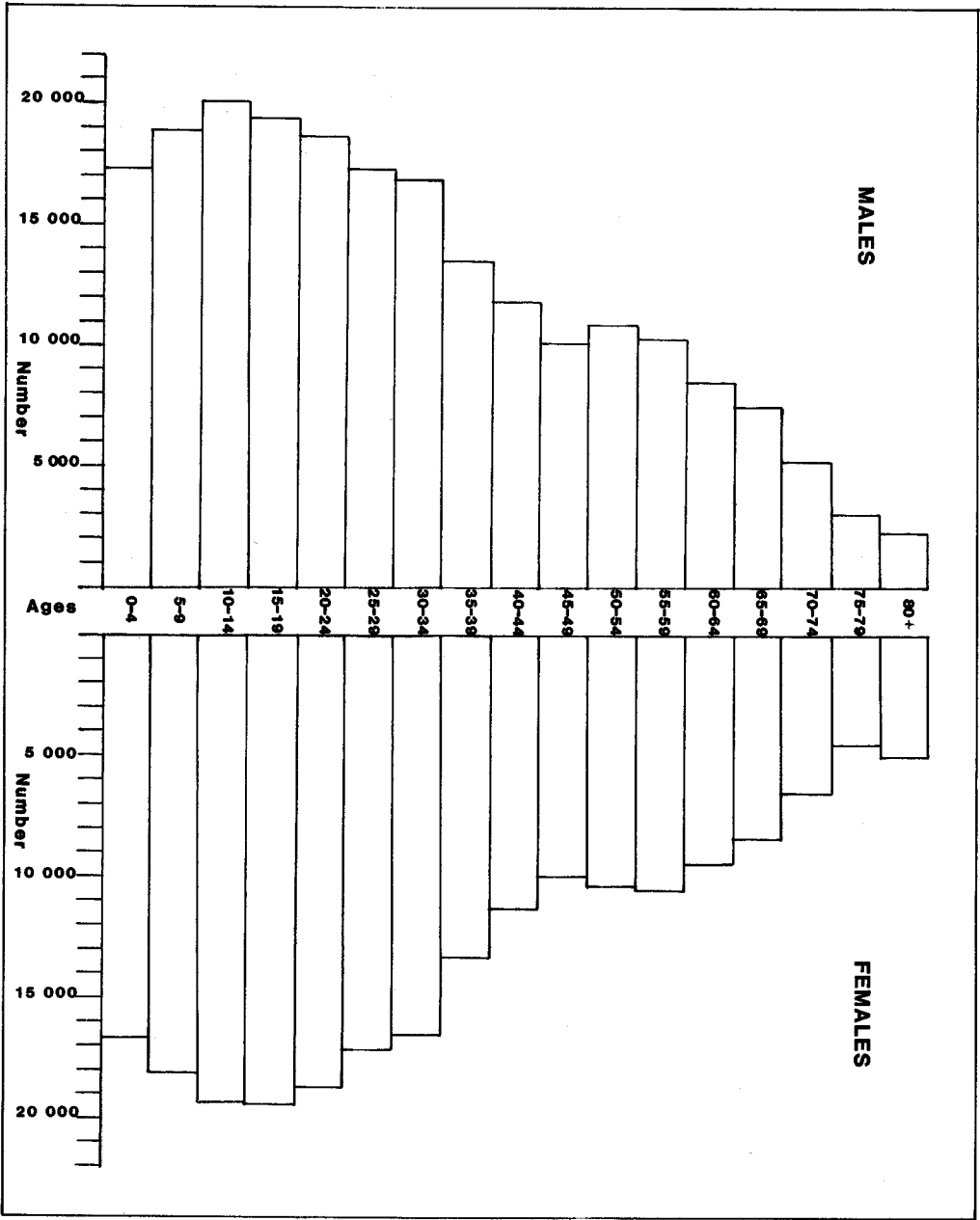
Population Density: Tasmanian Municipalities, 1981



Populations of Urban Centres, 1981



Age Structure, Tasmania, 30 June 1981



Interstate Arrivals and Departures

From 1 January 1979 the Tasmanian Office of the Australian Bureau of Statistics ceased collection of its series of recorded interstate and overseas arrivals and departures. The Tasmanian State Department of Tourism has developed a series, commencing from the September quarter of 1971, paralleling the Bureau's collection but with a different basis. It is the Department of Tourism's figures which are published in this issue.

The table below shows recorded arrivals and departures of interstate passengers travelling either by air or sea. The following persons are *not* included: passengers under three years of age, accompanied by an adult; passengers travelling on chartered flights with minor carriers; passengers travelling on private or VIP flights; and passengers arriving or departing on overseas ships.

Recorded Interstate Arrivals and Departures: Tasmania
(Source: Department of Tourism)

Year	Arrivals	Departures	Quarter ending	Arrivals	Departures
1976	509 356	507 384	1981-June	132 377	141 170
1977	538 665	530 535	September	125 839	125 251
1978	557 275	559 293	December	156 484	138 703
1979	576 050	574 840	1982-March	166 818	183 812
1980	590 680	591 509	June	139 738	147 414
1981	582 644	586 175	September	124 444	123 903

Urban and Rural Population

Distinction Between Urban and Rural

After the Censuses of 1954 and 1961, the Commonwealth Statistician published a population classification using the terms 'metropolitan', 'urban', and 'rural'. Delineation of the urban boundaries was subjective and the methods used were not completely comparable between states.

In order to develop an objective definition of 'urban' and 'rural' areas, Dr G. J. R. Linge of the Australian National University was commissioned by the Commonwealth Statistician to make a report.

At the 31st Conference of Statisticians in 1969, the following resolutions relating to the delimitation of urban areas based substantially on Dr. Linge's report were passed:

- (i) At each Census a boundary shall be defined for each population cluster of 1 000 or more population (special rules apply to known holiday resorts). These clusters are to be known as urban centres, and are moving boundaries which are to be adjusted after each Census;
- (ii) Around each urban centre with a population of at least 100 000, a further boundary shall be defined to contain the anticipated urban development for a period of at least 20 years. This boundary which is fixed, should delimit an area which is socially and economically oriented towards the urban centre;
- (iii) In delimiting urban centres with 25 000 or more population, all contiguous census collection districts which have a population density of 200 or more persons per square kilometre shall be included (subject to certain special rules);
- (iv) Urban centres with less than 25 000 population shall be delimited subjectively (e.g. by the inspection of aerial photographs, by field inspection etc.).

Revised Criteria, 1976

For the 1976 Population Census, the statisticians agreed that the concept of *inner* and *outer* boundary be adopted for all towns and cities with populations of 25 000 or more persons. (Previously this concept was only applied to cities with a population of at least 100 000.) This decision affected Tasmania since the Launceston area met these criteria. The Launceston Statistical District was therefore established. (Although neither Burnie

nor Devonport currently meet these criteria as individual urban centres, the criteria are met if the area is considered a single entity with twin foci. As a result the Burnie-Devonport Statistical District has been delineated and data for this district is available from the 1981 Census of Population and Housing.)

Populations Centred on Hobart, Launceston and Burnie-Devonport

Populations centred on Hobart, Launceston and Burnie-Devonport are compiled and published on a two boundary basis. For Hobart the two boundary concept was introduced in 1966, Launceston in 1976 and Burnie-Devonport in 1981. The boundaries are:

- (i) A fixed outer boundary to enclose expected urban growth over the next 20 to 30 years;
 - (a) The Hobart Statistical Division comprises the cities of Hobart and Glenorchy, Clarence municipality and parts of Kingborough, New Norfolk, Brighton and Sorell municipalities;
 - (b) The Launceston Statistical District comprises the City of Launceston and parts of seven neighbouring municipalities;
 - (c) The Burnie-Devonport Statistical District comprises the City of Devonport and parts of other municipalities along the North West Coast.

Maps of these areas are contained in Chapter 2.

- (ii) A moving inner boundary which moves out towards the fixed outer boundary as urban growth occurs;
 - (a) Urban Hobart comprises the continuous urban portions of the cities of Hobart and Glenorchy and of the municipalities of Clarence and Kingborough. It stretches from Granton in the north to Tarooma in the south on the western shore and on the eastern shore from Risdon Vale southward to Rokeby;
 - (b) Urban Launceston is the area of continuous urban development centred on Launceston City and includes parts of the municipalities of Beaconsfield, Westbury, Evandale, St Leonards and Lilydale;
 - (c) Urban Burnie is the continuous area of development around the town centre and includes Somerset in the Wynyard municipality. Urban Devonport is the area of continuous development around the urban centre.

Estimated resident populations of the fixed outer boundary areas are given in an earlier table.

1981 CENSUS RESULTS

The following selected tables contain information from the 1981 Census. The figures are 'as counted' i.e. no adjustments for under-enumeration nor place of usual residence have been made. More detailed census statistics about the population can be obtained from the Bureau on request.

Population in Urban Centres and Bounded Localities

The next table shows the 'as counted' population and dwellings of urban centres and bounded localities in Tasmania at 30 June 1981:

Persons and Total Dwellings in Urban Centres and Bounded Localities at 30 June 1981

Locality	Males	Females	Persons	Occupied dwellings	Unoccupied dwellings
Beaconsfield	426	472	898	296	39
Beauty Point	507	491	998	344	90
Bicheno	336	338	674	214	131
Bothwell	187	169	356	131	26
Bracknell	173	174	347	111	2
Branxholm	141	132	273	91	6
Bridgewater-Gagebrook	3 339	3 541	6 880	1 780	79
Bridport	427	458	885	344	242

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Persons and Total Dwellings in Urban Centres and Bounded Localities at 30 June 1981—continued

Locality	Males	Females	Persons	Occupied dwellings	Unoccupied dwellings
Burnie-Somerset	10 029	10 339	20 368	6 584	465
Campbell Town	415	464	879	300	24
Carrick	145	146	291	91	8
Cremorne	143	132	275	104	76
Cressy	319	321	640	207	8
Currie	443	416	859	288	29
Cygnat	350	365	715	237	20
Deloraine	904	1 019	1 923	691	54
Devonport	10 267	11 157	21 424	7 040	483
Dilston	122	101	223	73	8
Dodges Ferry	357	386	743	260	501
Dover	297	273	570	189	60
Dunalley	105	98	203	79	56
Electrona	110	117	227	61	5
Evandale	314	300	614	203	7
Exeter	171	182	353	105	8
Fingal	231	193	424	144	16
Forth	132	141	273	84	3
Franklin	227	252	479	138	4
Geeveston	434	426	860	262	24
George Town	2 828	2 764	5 592	1 584	112
Grassy	467	313	780	189	13
Gravelly Beach	265	270	535	189	13
Hadsphen	450	458	908	267	14
Hagley	117	115	232	61	2
Heybridge	191	204	395	146	8
Hobart	62 834	65 769	128 603	43 881	2 600
Huonville-Ranelagh	686	661	1 347	463	30
Kempton	120	106	226	73	4
Kettering	136	152	288	88	11
Kingston-Blackmans Bay	4 194	4 362	8 556	2 764	155
Lanena-Blackwall	208	231	439	174	18
Latrobe	1 180	1 221	2 401	721	40
Lauderdale	1 057	1 060	2 117	672	66
Launceston	31 210	33 345	64 555	21 734	1 387
Legana	477	487	964	302	15
Lilydale	158	150	308	108	5
Longford	988	1 039	2 027	689	46
Low Head	171	168	339	111	104
Luina	324	198	522	125	19
Margate	242	234	476	151	3
Maydena	239	222	461	128	24
Mole Creek	163	140	303	101	18
New Norfolk	3 129	3 114	6 243	1 682	116
Nubeena	121	104	225	81	24
Oatlands	271	274	545	199	23
Orford	195	183	378	160	212
Penguin	1 270	1 346	2 616	826	60
Perth	616	613	1 229	418	24
Pontville	460	448	908	282	16
Port Sorell	415	444	859	318	231
Queenstown	1 925	1 789	3 714	1 169	125
Railton	444	413	857	275	21
Richmond	299	288	587	207	17
Ridgley	223	229	452	127	4
Ringarooma	111	112	223	83	4
Rosebery	1 485	1 190	2 675	648	51
Ross	141	148	289	104	22
Rossarden	207	158	365	106	69
St Helens	495	510	1 005	354	80
St Marys	318	335	653	221	26
Savage River	632	509	1 141	292	33
Scottsdale	998	1 004	2 002	652	34
Seven Mile Beach	352	330	682	230	17

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Persons and Total Dwellings in Urban Centres and Bounded Localities at 30 June 1981—continued

Locality	Males	Females	Persons	Occupied dwellings	Unoccupied dwellings
Sheffield	462	483	945	281	21
Smithton	1 692	1 686	3 378	1 060	52
Snug	352	332	684	213	15
Sorell-Midway Point	1 288	1 256	2 544	829	52
Stanley	311	292	603	206	30
Strahan	196	206	402	136	16
Sulphur Creek	175	192	367	117	9
Swansea	205	223	428	156	47
Tarraleah	287	211	498	125	10
Triabunna	475	449	924	272	20
Tullah	1 369	525	1 894	296	17
Turners Beach	415	427	842	264	23
Ulverstone	4 456	4 957	9 413	3 154	247
Waratah	185	157	342	119	24
Westbury	561	600	1 161	410	28
Woodbridge	147	112	259	78	6
Wynyard	2 269	2 313	4 582	1 432	108
Zeehan	959	791	1 750	482	28

Religious Denomination

The religious denomination question is the only non-compulsory census question on the schedule. The next table shows the religious denomination of the population at the 1976 and 1981 censuses.

Religious Denomination at 30 June

Religious denomination	1976 Census		1981 Census			
	Persons	Proportion	Males	Females	Persons	Proportion
Christian—	no.	percent	no.	no.	no.	percent
Baptist	7 940	2.0	3 792	4 173	7 965	1.9
Brethren	3 986	1.0	1 891	2 056	3 947	0.9
Catholic (a)	75 092	18.6	38 349	39 794	78 143	18.7
Church of Christ	2 188	0.5	954	1 156	2 110	0.5
Church of England	158 748	39.4	73 530	77 677	151 207	36.1
Congregational	3 266	0.8	840	950	1 790	0.4
Jehovah's Witness	1 377	0.3	675	835	1 510	0.4
Latter Day Saints/ Mormons	(b)	(b)	601	680	1 281	0.3
Lutheran	1 712	0.4	831	800	1 631	0.4
Methodist— includ- ing Wesleyan	37 107	9.2	9 647	10 259	19 906	4.8
Orthodox	1 743	0.4	1 019	836	1 855	0.4
Pentecostal	811	0.2	637	720	1 357	0.3
Presbyterian	14 899	3.7	5 513	6 062	11 575	2.8
Salvation Army	2 880	0.7	1 449	1 753	3 202	0.8
Seventh Day Ad- ventist	1 294	0.3	649	815	1 464	0.3
Uniting Church	(c)	(c)	7 979	9 689	17 668	4.2
Protestant un- defined	3 455	0.9	2 504	2 713	5 217	1.2
Christian n.e.i.	7 744	1.9	2 771	2 815	5 586	1.3
Total	324 242	80.5	153 631	163 783	317 414	75.8
Buddhist	(d)	(d)	122	114	236	0.1
Hebrew	121	0.0	76	69	145	0.0
Muslim	135	0.0	223	146	369	0.1
Non-Christian n.e.i.	523	0.1	304	209	513	0.1
Total	779	0.2	725	538	1 263	0.3

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Religious Denomination at 30 June—continued

Religious denomination	1976 Census		1981 Census			
	Persons	Proportion	Males	Females	Persons	Proportion
Inadequately described	2 223	0.6	5 811	5 351	11 162	2.7
No religion (so described)	27 624	6.9	20 589	15 633	36 222	8.6
Not stated	47 998	11.9	27 885	25 011	52 896	12.6
Total	402 865	100.0	208 641	210 316	418 957	100.0

(a) Includes Catholic and Roman Catholic.

(b) Included with Christian n.e.i.

(c) The Uniting Church was formed in 1978 from members of the Congregational, Methodist and Presbyterian churches.

(d) Included with Non-Christian n.e.i.

Marital Status

Marital status of the population at the 1971, 1976 and 1981 Censuses is shown in the next table:

Marital Status of the Population at 30 June

Category	1971 Census	1976 Census	1981 Census			
			Males	Females	Persons	Proportion per cent
Never Married						
Under 15 years of age	121 323	115 664	56 025	53 579	109 604	26.2
Other	65 213	70 228	45 131	34 936	80 067	19.1
Total never married	186 536	185 892	101 156	88 515	189 671	45.3
Married	177 057	185 055	95 072	94 370	189 442	45.2
Separated and not divorced	4 798	6 709	3 499	4 128	7 627	1.8
Divorced	3 401	5 868	4 898	5 957	10 855	2.6
Widowed	18 621	19 340	4 016	17 346	21 362	5.1
Total	390 413	402 865	208 641	210 316	418 957	100.0

Birthplace

The following table shows the country of birth of the population from the 1971, 1976 and 1981 population censuses.

Birthplaces of the Population at 30 June

Country of Birth	1971 Census	1976 Census	1981 Census			
			Males	Females	Persons	Proportion percent
Australia	350 150	361 863	183 359	188 265	371 624	88.7
New Zealand	1 550	1 800	1 253	1 168	2 421	0.6
U.K. and Eire	22 513	22 915	11 839	11 450	23 289	5.6
Germany	2 009	1 886	1 039	897	1 936	0.5
Greece	911	854	429	356	785	0.2
Italy	1 485	1 423	835	508	1 343	0.3
Netherlands	3 183	2 916	1 577	1 431	3 008	0.7
Poland	1 456	1 372	801	474	1 275	0.3
Yugoslavia	1 020	886	536	254	790	0.2
Other Europe	2 797	2 902	1 651	1 029	2 680	0.6
Asia	1 666	1 735	1 169	1 258	2 427	0.6
America	707	1 103	569	563	1 132	0.3
Africa	695	733	494	476	970	0.2
Other & Not Stated						
(a)	271	477	3 090	2 187	5 277	1.3
Total	390 413	402 865	208 641	210 316	418 957	100.0

(a) In 1971 and 1976 Not Stated birthplace was coded to Australia.

The Labour Force

The following table provides details of the labour force status of the population at the 1976 and 1981 Censuses:

Labour Force Status of the Population 1976 and 1981

Labour force	1976 Census				1981 Census			
	Males no.	Females no.	Persons no.	Pro- portion percent	Males no.	Females no.	Persons no.	Pro- portion percent
In the labour force—								
Employed—								
Wage or salary earner	92 447	47 253	139 700	34.7	92 771	52 430	145 201	34.7
Self-employed	8 977	3 402	12 379	3.1	9 498	4 072	13 570	3.2
Employer	6 413	2 667	9 081	2.3	6 706	3 112	9 818	2.3
Helper	441	2 344	2 786	0.7	334	1 479	1 813	0.4
Total	108 278	55 667	163 945	40.7	109 309	61 093	170 402	40.7
Unemployed	4 002	2 676	6 679	1.7	8 547	5 569	14 116	3.4
Total labour force	112 280	58 343	170 624	42.4	117 856	66 662	184 518	44.0
Not in the labour force—								
15 years and over	30 188	86 390	116 578	28.9	34 760	90 075	124 835	29.8
Under 15 years	59 043	56 620	115 664	28.7	56 025	53 579	109 604	26.2
Total	89 231	143 010	232 242	57.6	90 785	143 654	234 439	56.0
Total	201 512	201 354	402 865	100.0	208 641	210 316	418 957	100.0

Australia follows international definitions in defining the labour force which was defined as comprising persons: (i) who worked for payment or profit; (ii) who had a job from which they were temporarily absent (e.g. on holiday, sick); (iii) who were temporarily laid-off without pay; and (iv) who did not have a job and were actively looking for work.

Occupation

The following table shows the industry sector of the employed persons at the 1976 and 1981 Censuses:

Industry Sector of the Employed Labour Force, 1976 and 1981

Industry sector	30 June 1976				30 June 1981			
	Males no.	Females no.	Persons no.	Pro- portion percent	Males no.	Females no.	Persons no.	Pro- portion percent
Australian Government	6 270	2 389	8 659	5.3	7 655	2 958	10 613	6.2
State Government	19 485	13 492	32 977	20.1	19 441	15 305	34 746	20.4
Local Government	2 486	453	2 939	1.8	2 569	446	3 015	1.8
Private Sector (a)	80 037	39 334	119 371	72.8	74 876	37 727	112 603	66.1
Not Stated	(a)	(a)	(a)	(a)	4 768	4 657	9 425	5.5
Total	108 278	55 668	163 946	100.0	109 309	61 093	170 402	100.0

(a) Industry sector 'not stated' in 1976 are included in Private Sector.

The next table provides details of the industry group of employed persons.

Industry Group of Employed Labour Force, 1976 and 1981

Industry	30 June 1976				30 June 1981			
	Males no.	Females no.	Persons no.	Pro- portion percent	Males no.	Females no.	Persons no.	Pro- portion percent
Agriculture, forestry, fishing and hunting	9 631	3 085	12 717	7.8	10 186	2 809	12 995	7.6
Mining	3 954	258	4 212	2.6	4 026	285	4 311	2.5
Manufacturing	22 796	4 874	27 670	16.9	21 373	4 751	26 124	15.3
Electricity, gas and water	2 951	230	3 181	1.9	4 308	333	4 641	2.7
Construction	11 732	860	12 592	7.7	9 895	1 068	10 963	6.4
Wholesale and retail trade	17 930	11 214	29 144	17.8	17 090	11 988	29 078	17.1
Transport and storage	7 401	866	8 267	5.0	7 144	1 012	8 156	4.8
Communication	2 436	700	3 136	1.9	2 535	866	3 401	2.0
Finance, property and business services	5 649	4 212	9 861	6.0	5 824	4 934	10 758	6.3
Public administration and defence	5 447	2 318	7 765	4.7	6 053	2 793	8 846	5.2
Community services	8 876	15 634	24 510	15.0	10 868	18 749	29 617	17.4
Entertainment and recreation services	4 164	5 327	9 491	5.8	4 296	5 913	10 209	6.0
Not classifiable	1 044	299	1 343	0.8	1 064	334	1 398	0.8
Not stated	4 268	5 789	10 057	6.2	4 646	5 257	9 903	5.8
Total employed persons	108 278	55 668	163 946	100.0	109 308	61 092	170 400	100.0

Dwellings

Census information relating to dwellings is contained in Chapter 11.

VITAL STATISTICS

Summary of Vital Statistics, Tasmania

Year	Number registered				Rate per 1 000 of mean population			Infant mortality (deaths under one year per 1 000 live births)
	Marriages	Live births	Deaths	Infant deaths (a)	Marriages	Live births	Deaths	
					P	P	P	
1976	3 477	6 702	3 389	77	r 8.43	r 16.26	r 8.22	11.5
1977	3 166	6 735	3 269	99	r 7.65	r 16.26	r 7.89	14.7
1978	3 148	6 788	3 311	97	r 7.56	r 16.30	r 7.95	14.3
1979	3 254	6 757	3 167	95	r 7.77	r 16.13	r 7.56	14.1
1980	3 433	6 735	3 392	79	r 8.11	r 15.91	r 8.01	11.7
1981	3 515	7 188	3 320	86	8.23	16.83	7.77	12.0

(a) Deaths under one year; included also in total deaths.

Crude Rate Comparisons

The rates per 1 000 of mean population for births, deaths and marriages are referred to as *crude rates*. It will be seen in regard to marriages, that not *all* the population is 'at risk'; children and those already married being obvious excluded examples. Similarly, births are clearly events related to certain fertile age groups of women and not to the total population. Births also are related to the number of married persons and to the age structure of the married proportion of the community. Finally, deaths have a definite relationship with the numbers of each sex and the age structure of the community. Therefore, crude rates are valid measures of comparison in the short term only.

Subject to this limitation, the following Tasmanian historical comparisons exist as from 1880:

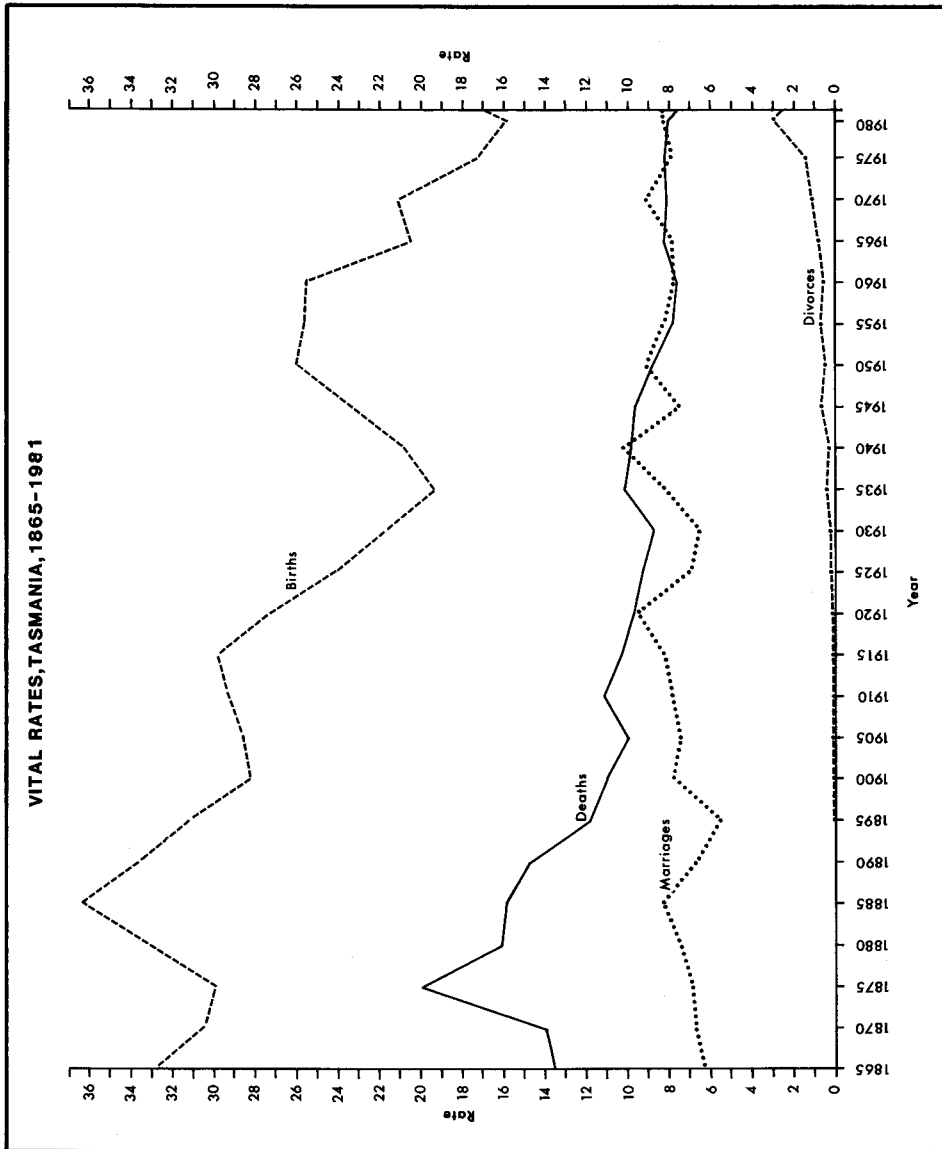
- (i) Crude marriage rate: highest 10.51 (1946); lowest 5.50 (1859 and 1896);
- (ii) Crude birth rate: highest 36.63 (1884); lowest 15.91 (1980);
- (iii) Crude death rate: highest 17.41 (1883); lowest 7.56 (1979).

It is probably significant that 1946 was the year of rapid demobilisation after World War II and that a similar marriage trend was recorded for 1919 and 1920 after World War I. The crude birth rate for 1980 (15.91 per 1 000 of mean population) is the lowest recorded. The popularly accepted theory attributes the current low figure to deliberate family planning.

Review of Infant Mortality

Infant mortality relates to the number of deaths of children aged *under one year* and the rate is expressed as the number of such deaths per 1 000 live births. It follows that comparisons over long periods of time are valid and not affected by the limitations attached to crude rates. The peak year since 1880 was 1883 with a rate of 124.0. In the period 1880-1910, the annual infant mortality rate exceeded 100 on 14 occasions. There has been a steady improvement in infant mortality rates over the past 50 years. The rate for the period 1916-1920 was 64, for the year 1961, 16.8, and in 1976 a record minimum of 11.5 was achieved.

At the turn of the century, 20 to 25 per cent of all deaths were those of infants under one year. The rapid fall in infant mortality rates since then has had a marked effect on the crude death rate. Infant mortality has fallen largely due to advances in medical science enabling the control of disease and the development of techniques to reduce perinatal deaths; improvements in child care and nutrition also have made a significant contribution. (A perinatal death is defined as; (i) the death of a viable foetus (product of conception of at least 20 weeks gestation or of weight not less than 400 grams) at any time up to the complete expulsion or extraction from its mother; and (ii) the death of a child born alive, where the death occurs at any time before the twenty-ninth day after the date of birth of the child. Details relating to perinatal deaths are included in the annual bulletins *Demography, Tasmania* (3101.6) and *Causes of Death, Tasmania* (3301.6).



Marriages

The following table analyses the ages of all bridegrooms and brides contracting marriages registered in 1981:

Bridegrooms and Brides by Age, Tasmania 1981

<i>Age last birthday (years)</i>	<i>Bridegrooms</i>		<i>Brides</i>	
	<i>Number</i>	<i>Per cent of total</i>	<i>Number</i>	<i>Per cent of total</i>
Under 20	151	4.30	695	19.77
20-24	1 579	44.92	1 674	47.62
25-29	884	25.15	536	15.25
30-34	384	10.92	249	7.08
35-39	180	5.12	127	3.61
40-44	96	2.73	71	2.02
45-49	65	1.85	48	1.37
50-54	49	1.39	33	0.94
55-59	45	1.28	28	0.80
60-64	37	1.05	23	0.65
65 and over	45	1.28	31	0.88
Total	3 515	100.00	3 515	100.00

The next table gives the average age of brides and bridegrooms in recent years based on 'age last birthday' figures:

Average Age of Bridegrooms and Brides (Years), Tasmania

<i>Particulars</i>	<i>1976</i>	<i>1977</i>	<i>1978</i>	<i>1979</i>	<i>1980</i>	<i>1981</i>
Average age of bridegrooms—						
Bachelors	23.8	24.0	24.0	24.3	24.2	24.4
Widowers	55.3	56.2	56.7	57.2	57.1	59.0
Divorcees	37.7	37.7	37.6	37.3	37.0	36.1
All bridegrooms	27.0	27.3	27.4	27.7	27.5	27.8
Average age of brides—						
Spinsters	21.2	21.2	21.4	21.4	21.7	21.9
Widows	47.9	47.1	51.0	50.1	51.0	50.4
Divorcees	33.9	33.8	33.4	34.7	33.8	32.7
All brides	24.2	24.4	24.7	24.8	24.8	25.0

The following three tables show: (i) the number of persons under 21 years of age marrying; (ii) the conjugal condition of persons marrying; and (iii) marriages according to the type of marriage ceremony conducted, for a six-year period.

Marriages: Persons Under 21 Years of Age, Tasmania

<i>Year</i>	<i>Age in Years</i>						<i>Persons under 21 years</i>	
	<i>15</i>	<i>16</i>	<i>17</i>	<i>18</i>	<i>19</i>	<i>20</i>	<i>Number</i>	<i>Percentage of all marriages</i>
<i>Bridegrooms</i>								
1976	—	—	4	111	191	347	653	18.78
1977	—	—	1	77	156	286	520	16.42
1978	—	—	3	66	151	285	505	16.04
1979	—	—	3	62	128	267	460	14.14
1980	—	—	6	57	133	248	444	12.93
1981	—	—	1	49	101	228	379	10.78

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Marriages: Persons Under 21 Years of Age, Tasmania—continued

Year	Age in Years						Persons under 21 years	
	15	16	17	18	19	20	Number	Percent-age of all marriages
<i>Brides</i>								
1976	1	61	169	410	459	476	1 576	45.33
1977	2	57	128	375	432	367	1 361	42.99
1978	1	43	105	317	433	406	1 305	41.45
1979	1	38	106	308	421	387	1 261	38.75
1980	—	37	86	272	399	455	1 249	36.38
1981	1	20	74	238	362	457	1 152	32.77

Conjugal Condition of Persons Marrying, Tasmania

Year	Bridegrooms				Brides		Total marriages
	Bachelors	Widowers	Divorcees	Spinsters	Widows	Divorcees	
1976	2 798	98	581	2 805	132	540	3 477
1977	2 521	89	556	2 498	122	546	3 166
1978	2 508	107	533	2 467	125	556	3 148
1979	2 555	109	590	2 567	128	559	3 254
1980	2 687	92	654	2 719	119	595	3 433
1981	2 699	103	713	2 729	134	652	3 515

Marriages, Religious and Civil, Tasmania

Particulars of celebration	1976	1977	1978	1979	1980	1981
Religious rites—						
Anglican	1 067	989	959	945	929	962
Catholic	595	539	515	500	508	554
Presbyterian (a)	128	66	34	38	16	51
Methodist	442	212	—	—	r —	—
Congregational	28	14	—	—	r —	—
Baptist	94	91	77	87	99	72
Churches of Christ	34	24	22	19	17	32
Salvation Army	17	26	33	21	26	34
Seventh Day Adventist	5	5	12	10	11	14
Uniting Church (b)	—	—	428	371	464	388
Other	130	94	109	164	r 157	143
Civil ceremonies (c)	937	1 106	959	1 099	1 206	1 265
Total	3 477	3 166	3 148	3 254	3 433	3 515

(a) From 1978 figures relate to 'Continuing Presbyterians' only, following the amalgamation of the Presbyterian, Methodist and Congregational Churches.

(b) In 1978 Presbyterian, Methodist and Congregational Churches amalgamated to form the 'Uniting Church'.

(c) Marriages contracted before Registrars and Marriage Celebrants.

Divorce

The *Matrimonial Causes Act* 1860, as amended, provided for divorce in Tasmania until 1 February 1961, when Australia came under a uniform divorce law, the *Matrimonial Causes Act* 1959, passed by the Federal Parliament. The *Family Law Act* 1975

came into effect on 5 January 1976, replacing the *Matrimonial Causes Act 1959*. The main changes were the creation of the Family Court of Australia and the alteration of the grounds for divorce to the sole ground of irretrievable breakdown of marriage after 12 months separation. The commencement of the Family Court of Australia had a dramatic effect on the figures. In 1976 dissolutions of marriage represented 50.62 per cent of the number of marriages contracted for that year (1 761 dissolutions compared with 3 477 marriages).

The following table gives the number of petitions filed by husbands and wives respectively, and the number of dissolutions of marriage during recent years. Every decree of dissolution of marriage is now, in the first instance, a decree *nisi* and is normally made absolute after a period of one month. Previously the period was three months.

Petitions Filed and Dissolutions Granted, Tasmania

Particulars	1976(a)	1977	1978	1979	1980	1981
Total petitions filed	2 180	1 063	1 097	1 141	1 276	1 240
Dissolutions (b) granted on petition of—						
Husband	675	396	427	426	512	423
Wife	1 085	738	705	741	773	716
Total dissolutions	1 761	1 134	1 132	1 167	1 285	1 139

(a) The Family Law Court came into operation in 1976.

(b) Includes nullities of marriage.

The following three tables dissect dissolutions of marriage granted during 1981 by ages of parties at the time of marriage, by ages of parties at the time of dissolution and by the duration and issue of marriage:

Dissolution of Marriage (a): Ages of Parties at Time of Marriage, Tasmania 1981

Age of husband (years)	Age of wife (years)							Total husbands
	Under 20	20-29	30-39	40-49	50-59	60 and over	Not stated	
Under 20	141	25	—	—	—	—	1	167
20-29	363	431	11	—	—	—	7	812
30-39	12	58	25	7	1	—	—	103
40-49	—	10	9	15	1	—	—	35
50-59	—	1	5	5	2	—	—	13
60 and over	—	—	—	2	—	4	—	6
Not stated	1	1	1	—	—	—	—	3
Total wives	517	526	51	29	4	4	8	1 139

(a) Excludes nullities of marriage.

Dissolutions of Marriage (a): Ages of Parties at Time of Dissolution, Tasmania, 1981

Age of husband (years)	Age of wife (years)							Total husbands
	Under 20	29-29	30-39	40-49	50-59	60 and over	Not stated	
Under 20	—	—	—	—	—	—	—	—
20-29	5	326	22	—	—	—	4	357
30-39	—	150	251	13	1	—	—	415
40-49	—	9	96	115	5	—	2	227
50-59	—	1	4	37	51	6	1	100
60 and over	—	—	—	9	15	12	1	37
Not stated	—	—	2	—	1	—	—	3
Total	5	486	375	174	73	18	8	1 139

(a) Excludes nullities of marriage.

Dissolutions of Marriage (a): Duration of Marriage and Issue, Tasmania, 1981

Duration of marriage (years)	Dissolutions of marriages with—						Total marriages dissolved	Total number of children (b)
	No children	1 child	2 children	3 children	4 children	5 or more children		
0-4	152	76	19	10	2	—	259	152
5-9	108	92	96	28	6	2	332	402
10-14	26	32	92	46	22	7	225	477
15-19	8	15	45	32	13	9	122	300
20-24	23	37	17	12	3	1	93	124
25-29	26	24	7	3	—	—	60	47
30 and over	40	6	2	—	—	—	48	10
Total	383	282	278	131	46	19	1 139	1 512

(a) Excludes nullities of marriage.

(b) Under 18 years of age.

Births

The following table shows the number of births classified according to the age of mother for recent years:

Number of Births Classified According to Age of Mother, Tasmania

Age group (years)	1976	1977	1978	1979	1980	1981	
						Number	Per cent
10-14	8	11	6	2	3	6	0.1
15-19	854	873	846	822	771	735	10.2
20-24	2 545	2 395	2 417	2 363	2 291	2 546	35.4
25-29	2 202	2 359	2 335	2 333	2 341	2 478	34.5
30-34	801	869	914	996	1 037	1 131	15.7
35-39	223	184	233	191	246	250	3.5
40-44	65	40	31	47	44	42	0.6
45 and over	4	4	6	3	2	—	—
Total births	6 702	6 735	6 788	6 757	6 735	7 188	100.0

One observation of interest is that births of males, in total, usually exceed those of females. The next table shows births by sex and indicates masculinity:

Births by Sex and Masculinity, Tasmania

Particulars	1976	1977	1978	1979	1980	1981
Births of—						
Males	3 464	3 463	3 438	3 418	3 479	3 656
Females	3 238	3 272	3 350	3 339	3 256	3 532
Total	6 702	6 735	6 788	6 757	6 735	7 188
Masculinity (a)	106.98	105.84	102.63	102.37	106.85	103.51

(a) Number of male births per 100 female births.

In the following table, births are analysed by sex and by age of the mother and classified as nuptial or ex-nuptial:

Births by Sex, Age of Mother and Nuptial State, Tasmania, 1981

Age group (years)	Nuptial births		Ex-nuptial births		All births		Total
	Male	Female	Male	Female	Male	Female	
10-14	—	—	1	5	1	5	6
15-19	171	159	192	213	363	372	735
20-24	1 113	1 046	197	190	1 310	1 236	2 546
25-29	1 160	1 150	94	74	1 254	1 224	2 478
30-34	535	529	34	33	569	562	1 131
35-39	128	100	13	9	141	109	250
40-44	15	19	3	5	18	24	42
45 and over	—	—	—	—	—	—	—
Total	3 122	3 003	534	529	3 656	3 532	7 188

Birth Rates

The *crude birth rate* is expressed as the number of births per 1 000 of mean population; this is obviously an unsatisfactory measure since births are events strictly related to the number of women in the fertile age groups. A more satisfactory index is the *fertility rate*, expressed as the number of births per 1 000 women aged 15-44 years. However, there are profound differences between the relative fertility of various age groups and a further refinement is the calculation of *age-specific birth rates*. The following table shows age-specific birth rates for each five-year age group of females from 10-49 years, the fertility rate applicable to all women in the age group 15-44 years and the crude birth rate:

Birth and Fertility Rates, Tasmania

Particulars	1976	1977	1978	1979	1980	1981
<i>Age Specific Birth Rates (a)</i>						
Age group (years)—						
10-14	0.4	0.6	0.3	0.1	0.2	0.3
15-19	r 43.6	r 44.2	r 42.7	r 41.5	r 38.8	37.8
20-24	r 150.8	r 140.6	r 141.4	r 135.3	r 125.3	136.2
25-29	r 133.9	r 147.1	144.9	r 144.1	r 139.7	145.1
30-34	r 61.6	r 61.7	r 61.5	r 65.3	r 64.9	68.5
35-39	r 19.3	r 15.8	19.7	r 15.6	19.2	18.9
40-44	6.4	3.9	r 2.9	4.4	4.0	3.7
45-49	0.4	0.4	0.6	0.3	0.2	—
<i>Fertility Rate (b)</i>						
Fertility rate	r 76	r 76	r 75	r 74	r 71	75
<i>Crude Birth Rate (c)</i>						
Crude birth rate	r 16.3	r 16.3	r 16.3	r 16.1	15.9	16.8

(a) Number of births per 1 000 women in age groups shown.

(b) Number of births per 1 000 women aged 15-44 years.

(c) Number of births per 1 000 of mean population.

Total Fertility and Gross and Net Reproduction Rates

Total fertility for a population is obtained either by summing single age-specific birth rates for a year and dividing by 1 000 or by summing five-year age-specific birth rates, multiplying by five and dividing by 1 000. The result represents the hypothetical number of children a woman would bear throughout her child bearing years if she experienced the age-specific birth rates for that particular year during her lifetime.

The *gross reproduction rate* is derived from *total fertility* and the ratio of female to total births. It indicates the number of female children who would be born on average to women, supposing the rates from which it was calculated were to apply throughout the reproductive period. It is an indication of the extent to which the population is reproducing itself except that it does not allow for females who failed to survive to the end of their childbearing period. The *net reproduction rate* allows for such mortality. It is obtained by multiplying the age-specific rates by the survivor proportions in the corresponding age group of the stationary or life table population. Mortality in childhood and young adulthood is now so low that there is little difference between current gross and net reproduction rates.

A net reproduction rate of one indicates that the reproduction pattern for the particular year is such as to replace the current generation of mothers by an equivalent number of daughters, if continued.

The next table gives total fertility rates and gross and net reproduction rates for Tasmania for recent years. If the net reproduction rate of a country falls below unity the population will ultimately decrease and die out (assuming there is no net immigration gain) unless fertility is raised and/or mortality lowered. The fact that the population may be currently increasing is irrelevant.

Total Fertility, and Gross and Net Reproduction Rates, (a) Tasmania

Year	Total fertility	Gross reproduction rate	Net reproduction rate
1976	r 2.082	1.017	0.994
1977	r 2.072	1.008	0.986
1978	r 2.070	r 1.029	r 0.992
1979	r 2.033	r 1.008	r 0.973
1980	r 1.962	r 0.956	r 0.922
1981	2.053	1.015	0.979

(a) Rates from 1978 onward are based on the state of usual residence of females. Previous figures are not strictly comparable as they were based on births 'registered' in Tasmania and the female population based on the state in which females were located at census dates.

Infant Mortality

Infant mortality relates to children dying within one year of birth. The table that follows analyses such deaths in further detail and shows that the greatest mortality rate is associated with infants in their first day of life. To obtain a correct picture of relative risk, it should be noted that deaths in the 'one day and under one week' class are spread over six days; in the 'one week and under four weeks' class spread over 21 days; and in the final class, spread over 338 days.

Infant Mortality: Number of Deaths and Mortality Rates at Specific Ages, Tasmania

Year	Infant deaths		Mortality rate (a) at age specified			
	Number	Per 1 000 live births	Under 1 day	1 day and under 1 week	1 week and under 4 weeks	4 weeks and under 12 months
1976	77	11.5	2.5	3.1	0.7	5.1
1977	99	14.7	3.1	3.3	0.7	7.6
1978	97	14.3	4.7	3.1	0.6	5.9
1979	95	14.1	3.7	3.0	1.8	5.6
1980	79	11.7	3.9	1.7	1.2	4.9
1981	86	12.0	5.1	1.1	1.0	4.7

(a) Infant deaths per 1 000 live births.

Causes of Infant Deaths

The following table has been compiled on the basis of the Ninth Revision (1975) of the International Classification of Diseases (World Health Organisation):

Infant Mortality: Causes of Death Under One Year, Tasmania, 1981

Cause	Age					Total
	Under one week	1 week to 1 month	1 month to 3 months	3 months to 6 months	6 months to 1 year	
001-139 Infectious and parasitic diseases.	—	—	—	—	—	—
320-389 Diseases of the nervous system	—	1	—	—	—	1
390-459 Diseases of the circulatory system	—	—	—	—	—	—
460-519 Diseases of the respiratory system	—	—	—	1	—	1
520-579 Diseases of the digestive system	—	—	—	—	—	—
740-759 Congenital anomalies	17	2	1	2	1	23
760 Perinatal causes—						
Maternal diseases and conditions	—	—	—	—	—	—
761-763 Obstetric complications	—	—	—	—	—	—
764,765 Slow foetal growth and immaturity	7	—	—	—	—	7
767 Birth trauma	—	—	—	—	—	—
769 Respiratory distress syndrome	12	—	1	—	—	13
768,770 Hypoxia, birth asphyxia and other respiratory conditions	3	—	—	—	—	3
773 Haemolytic disease of foetus and newborn	—	—	—	—	—	—
Other perinatal causes	6	2	—	—	—	8
798.0 Sudden infant death syndrome (a)	—	2	9	12	6	29
All other diseases	—	—	—	—	—	—
E800-E999 Accidents, poisonings and violence	—	—	—	—	1	1
Total	45	7	11	15	8	86

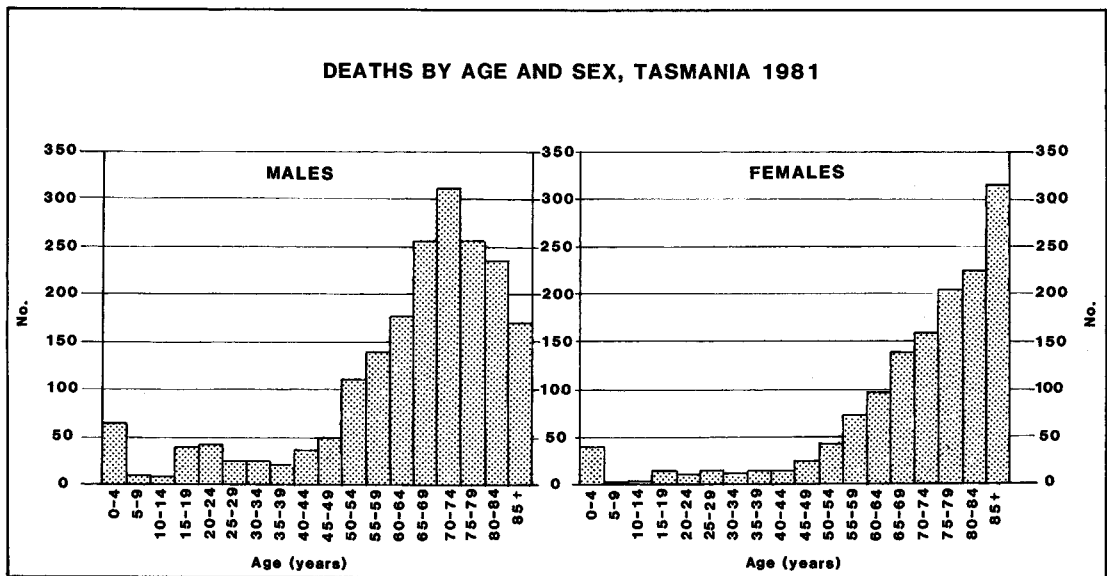
(a) 26 in 1975, 24 in 1976, 37 in 1977, 28 in 1978, 30 in 1979, and 23 in 1980.

Deaths

A marked difference exists between male and female crude death rates as shown in the following table:

Male and Female Deaths and Crude Rates, Tasmania

Year	Number of deaths			Deaths per 1 000 of mean population			Ratio of male to female crude death rates
	Males	Females	Persons	Males P	Females P	Persons P	
1976	1 850	1 539	3 389	r 8.97	r 7.47	r 8.22	1.201
1977	1 865	1 404	3 269	r 9.01	r 6.78	r 7.89	1.329
1978	1 840	1 471	3 311	r 8.84	r 7.06	r 7.95	1.252
1979	1 787	1 380	3 167	r 8.54	r 6.58	r 7.56	1.298
1980	1 937	1 455	3 392	9.20	r 6.84	r 8.01	1.345
1981	1 911	1 409	3 320	9.00	6.56	7.77	1.372



Death Rates for Specific Age Groups

Previously in this chapter, crude death rates were described as unsuitable for comparisons over long periods of time due to changes in the age structure of the community. In the following table, this difficulty is overcome by calculating death rates for specific age groups. The method employed is to obtain the average annual deaths for specific age groups over those three-year periods which are broken into equal parts by a census of population (e.g. 30 June 1947 is the census date for a calculation of rates in the three years, 1946-1948 inclusive). Rates can then be calculated by comparing the average number of deaths for each group with the number of persons in each group as revealed by the census. In theory, the calculation of such rates need not be restricted to periods for which a census date forms the midpoint but the advantage of accepting such restriction lies in the accuracy of the age distribution obtained from the census. In the table that follows, three-year periods have been selected appropriate to the censuses of 1947, 1971 and 1976.

Death Rates for Specific Age Groups (a), Tasmania

Age group (years)	Males			Females			Persons		
	1946-48	1970-72	1975-77	1946-48	1970-72	1975-77	1946-48	1970-72	1975-77
		r	r		r	r		r	r
0-4	9.13	4.41	3.67	7.24	2.89	2.92	8.21	3.67	3.30
5-9	1.15	0.46	0.49	0.69	0.35	0.28	0.92	0.41	0.39
10-14	0.67	0.56	0.42	0.39	0.29	0.31	0.53	0.43	0.36
15-19	1.62	2.39	2.20	1.46	0.59	0.56	1.54	1.50	1.39
20-24	2.10	2.01	1.98	1.79	0.51	0.30	1.94	1.27	1.14
25-29	2.12	1.83	1.11	1.74	0.81	0.65	1.93	1.33	0.88
30-34	2.27	1.80	1.42	1.90	0.78	0.80	2.09	1.30	1.12
35-39	3.10	2.08	1.90	2.59	1.31	1.24	2.85	1.70	1.58
40-44	3.93	3.39	3.28	3.51	1.86	2.02	3.73	2.65	2.70
45-49	5.88	5.30	5.98	4.66	3.04	3.51	5.28	4.19	4.78
50-54	9.52	9.55	8.90	7.84	5.67	5.17	8.65	7.61	7.04
55-59	16.98	15.52	14.63	10.03	8.02	9.00	13.44	11.80	11.77
60-64	23.87	25.18	23.15	17.30	12.35	11.31	20.53	18.63	17.12
65-69	41.82	39.59	36.88	27.35	21.40	17.90	34.56	30.22	27.10
70-74	58.43	62.17	61.04	49.47	36.50	33.26	53.80	47.55	45.57
75-79	103.22	92.09	93.14	77.00	60.85	52.21	89.78	72.86	68.28
80-84	156.64	136.74	138.55	123.49	97.22	90.64	138.41	111.66	106.22
85 and over	292.36	218.20	233.10	220.32	200.29	190.97	250.16	206.17	203.93

(a) Rate per 1 000 of the population in the specified age group at census date.

Causes of Death

The next table shows causes of death, the rates per 100 000 of mean population and the proportion of deaths by cause based on the Ninth Revision (1975) of the International Classification of Diseases (adopted for use in 1979).

Causes of Death: Numbers and Rates, Tasmania, 1981

Cause of death (a)	ICD9 Code Number	Number of deaths	Rate per 100 000 of mean population	Percentage of total deaths
Tuberculosis	010-018	4	1	0.1
Septicaemia	038	2	—	0.1
All other infectious and parasitic diseases	(b)	7	2	0.2
Infectious and parasitic dis- eases	001-139	13	3	0.4
Malignant neoplasm of stomach ..	151	42	10	1.3
Malignant neoplasm of colon	153	77	18	2.3
Malignant neoplasm of rectum, rectosigmoid junction and anus ..	154	25	6	0.8
Malignant neoplasm of trachea, bronchus and lung	162	160	37	4.8
Malignant neoplasm of female breast	174	45	11	1.4
Malignant neoplasm of cervix uteri	180	8	2	0.2
Leukaemia	204-208	27	6	0.8
All other malignant neoplasms	(c)	326	76	9.8
Malignant neoplasms	140-208	710	166	21.4
Diabetes mellitus	250	44	10	1.3
Anaemias	280-285	8	2	0.2
Meningitis	320-322	2	—	0.1
Chronic rheumatic heart disease ..	393-398	19	4	0.6
Hypertensive disease	401-405	42	10	1.3
Ischaemic heart disease	410-414	956	224	28.8

continued next page

Causes of Death: Numbers and Rates, Tasmania, 1981—continued

<i>Cause of death (a)</i>	<i>ICD9 Code Number</i>	<i>Number of deaths</i>	<i>Rate per 100 000 of mean population</i>	<i>Percentage of total deaths</i>
Acute Myocardial infarction	410	629	147	18.9
Cerebrovascular disease	430-438	365	85	11.0
Atherosclerosis	440	67	16	2.0
All other diseases of the circula- tory system	(d)	206	48	6.2
Diseases of the circulatory system	390-459	1 655	387	49.8
Pneumonia	480-486	40	9	1.2
Bronchitis, emphysema and asthma	490-493	61	14	1.8
Ulcer of stomach and duodenum .	531-533	22	5	0.7
Chronic liver disease and cirrhosis	571	31	7	0.9
Nephritis, nephrotic syndrome and nephrosis	580-589	14	3	0.4
Hyperplasia of prostate	600	6	1	0.2
Congenital anomalies	740-759	26	6	0.8
Certain conditions originating in the perinatal period	760-779	32	7	1.0
Signs, symptoms and ill-defined conditions	780-799	32	7	1.0
All other conditions	Remainder of 210-799	351	82	10.6
Motor vehicle traffic accidents	E810-E819	116	27	3.5
Accidental falls	E880-E888	20	5	0.6
All other accidents and adverse effects	(e)	66	15	2.0
Accidents and adverse effects.	E800-E949	202	47	6.1
Suicide	E950-E959	63	15	1.9
Homicide	E960-E969	4	1	0.1
All other external causes	(f)	4	1	0.1
Total, all causes	001-799 E880-E999	3 320	777	100.0

(a) No deaths were recorded in the following categories in 1981; Intestinal infectious disease (001-009), Whooping cough (033), Meningococcal infection (036), Tetanus (037), Smallpox (050), Measles (055), Malaria (084), Nutritional marasmus (261), Other protein calorie malnutrition (262, 263), Acute rheumatic fever (390-392), Influenza (487), Appendicitis (540-543), Abortion (630-639), Direct obstetrics deaths (640-646, 651-676), and Birth Trauma (767).

(b) 020-032, 034, 035, 039-049, 051-054, 056-083, 085-139.

(c) 140-150, 152, 155-161, 163-173, 175-179, 181-203.

(d) 415-429, 441-459.

(e) E800-E807, E820-E879, E890-E949.

(f) E970-E999.

Causes of Death in Age Groups

The previous tables showing causes of death make no reference to age, a complete dissection by age and cause being beyond the scope of a *Year Book*. Nevertheless, there is an extremely significant relationship between age and cause of death and the next table indicates, in summary form, their close inter-connection. For each of the specified causes in the next table, two percentages are shown: (i) deaths in a particular age group as a proportion of total deaths from all causes in that age group; and (ii) deaths in a particular age group as a proportion of total deaths from the same causes at all ages. The causes

chosen and specified are such that they account, in total, for approximately 75 per cent or more of deaths in most of the given age groups.

Attention is called to 'Accidental and violent deaths' (800-999) which account for 50 per cent of deaths in the age from 1 to 34 years inclusive. Also noteworthy is the present relative unimportance of 'Infective and parasitic diseases' (001-139). The most important group, in a total sense, is 'Diseases of the heart' (391-398, 401-405, 410-429) followed by 'Cancer (all forms)' (140-208); then 'Cerebrovascular diseases' (430-438); and 'Diseases of the respiratory system' (460-519). Nevertheless, the inter-connection between age and cause of death is so close that none of these causes needs to be specified for some age groups in the table.

Principal Causes of Death in Age Groups, Tasmania, 1981

Age group in years	Inter- national classifi- cation	Cause of death	Deaths from specified causes in age groups		
			Number	Proportion of deaths	
				In age group (per cent)	At all ages (per cent)
Under 1	798	Sudden death (cause unknown)	29	33.7	0.9
	740-759	Congenital anomalies	23	26.7	0.7
	768-770	Anoxic and hypoxic conditions	16	18.6	0.5
	765	Immaturity unqualified	7	8.1	0.2
	..	Other causes	11	12.8	0.3
		All causes	86	100.0	2.6
1-4	800-999	Accidents and violence	13	72.2	0.4
	798	Sudden Death (cause unknown)	2	11.1	0.1
	..	Other causes	3	16.7	0.1
		All causes	18	100.0	0.5
5-14	800-999	Accidents and violence	10	50.0	0.3
	140-208	Cancer (all forms) (a)	3	15.0	0.1
	460-519	Diseases of respiratory system	3	15.0	0.1
	..	Other causes	4	20.0	0.1
		All causes	20	100.0	0.6
15-19	800-999	Accidents and violence	45	86.5	1.4
	140-208	Cancer (all forms) (a)	2	3.8	0.1
	..	Other causes	5	9.6	0.2
		All causes	52	100.0	1.6
20-24	800-999	Accidents and violence	41	77.4	1.2
	140-208	Cancer (all forms) (a)	5	9.4	0.2
	..	Other causes	7	13.2	0.2
		All causes	53	100.0	1.6
25-34	800-999	Accidents and violence	43	57.3	1.3
	140-208	Cancer (all forms) (a)	14	18.7	0.4
	391-398	Diseases of heart	6	8.0	0.2
	401-405				
	410-429				
	..	Other causes	12	16.0	0.4
		All causes	75	100.0	2.3
35-44	800-999	Accidents and violence	26	31.3	0.8
	140-208	Cancer (all forms) (a)	23	27.7	0.7
	391-398	Diseases of heart	16	19.3	0.5
	401-405				
	410-429				

continued next page

Principal Causes of Death in Age Groups, Tasmania, 1981—continued

Age group in years	Inter- national classifi- cation	Cause of death	Deaths from specified causes in age groups		
			Number	Proportion of deaths	
				In age group (per cent)	At all ages (per cent)
35-44	530-579	Diseases of digestive system	9	10.8	0.3
	..	Other causes	9	10.8	0.3
		All causes	83	100.0	2.5
45-54	140-208	Cancer (all forms) (a)	81	35.5	2.4
	391-398	Diseases of heart	67	29.4	2.0
	401-405				
	410-429				
	800-999	Accidents and violence	24	10.5	0.7
	460-519	Diseases of respiratory system	17	7.5	0.5
	530-579	Diseases of digestive system	14	6.1	0.4
	..	Other causes	25	11.0	0.8
		All causes	228	100.0	6.9
55-64	391-398	Diseases of heart	182	37.4	5.5
	401-405				
	410-429				
	140-208	Cancer (all forms) (a)	132	27.2	4.0
	460-519	Diseases of respiratory system	47	9.7	1.4
	430-438	Cerebrovascular diseases	32	6.6	1.0
	800-999	Accidents and violence	31	6.4	0.9
	530-579	Diseases of digestive system	18	3.7	0.5
	..	Other causes	44	9.1	1.3
		All causes	486	100.0	14.6
65-74	391-398	Diseases of heart	348	40.3	10.5
	401-405				
	410-429				
	140-208	Cancer (all forms) (a)	236	27.3	7.1
	430-438	Cerebrovascular diseases	82	9.5	2.5
	460-519	Diseases of respiratory system	81	9.4	2.4
	440-448	Diseases of arteries	20	2.3	0.6
	530-579	Diseases of digestive system	24	2.8	0.7
	..	Other causes	73	8.4	2.2
		All causes	864	100.0	26.0
75 and over .	391-398	Diseases of heart	550	40.6	16.6
	401-405				
	410-429				
	430-438	Cerebrovascular diseases	237	17.5	7.1
	140-208	Cancer (all forms) (a)	213	15.7	6.4
	460-519	Diseases of respiratory system	104	7.7	3.1
	440-448	Diseases of arteries	85	6.3	2.6
	530-579	Diseases of digestive system	39	2.9	1.2
	..	Other causes	127	9.3	3.8
		All causes	1 355	100.0	40.8

(a) Includes Hodgkin's disease and the leukaemias.

Heart Diseases

As the previous two tables indicate, heart diseases (list items 391-398, 401-405, 410-429) are the greatest single cause of death. The next table summarises deaths from heart diseases for recent years:

Deaths from Heart Diseases (All Causes) (a), Tasmania

Year	Number of deaths			Death rate per 100 000 of mean population P	Deaths as a percentage of deaths from all causes
	Males	Females	Persons		
1976	710	515	1 225	r 297	36.1
1977	666	497	1 163	r 281	35.6
1978	651	491	1 142	r 274	34.5
1979	634	481	1 115	r 266	35.2
1980	678	421	1 099	r 260	32.4
1981	688	482	1 170	274	35.2

(a) List items 400-416, 420-443 in 1950; 390-398, 400-404, 410-429 from 1968; 391-398, 401-405, 410-429 from 1979.

Malignant Neoplasms

In the next table, deaths from malignant neoplasms are shown according to site, for recent years and selected earlier years:

Deaths from Malignant Neoplasms, (a) Tasmania

Site of disease	Sex	1960	1970	1979	1980	1981
Malignant Neoplasm of:						
Lip, oral cavity and pharynx	M	2	6	4	5	5
	F	—	1	1	4	5
Digestive organs and peritoneum	M	88	76	104	123	124
	F	86	81	75	114	101
Respiratory and intrathoracic organs	M	40	72	109	123	142
	F	3	19	22	41	27
Skin — Melanoma	M	3	2	8	6	5
	F	2	2	5	6	6
— Other	M	3	2	3	6	5
	F	—	3	2	1	1
Breast	M	—	—	2	—	—
	F	25	43	47	43	45
Cervix uteri	F	13	13	23	8	8
Body and unspecified parts of uterus	F	10	4	11	10	6
Ovary and other uterine adnexa	F	10	12	9	18	20
Prostate	M	25	27	28	30	40
Bladder (b)	M	22	14	14	9	20
	F		1	2	5	2
Other and unspecified genitourinary organs	M	8	8	17	15	14
	F		6	4	7	6
Brain and other and unspecified parts of nervous system	M	9	7	9	10	8
	F	1	7	4	10	10
Leukaemia	M	12	8	16	13	15
	F	9	7	11	9	17
Other neoplasms of lymphatic and haematopoietic system	M	19	11	19	16	15
	F	5	12	5	13	21
All other and unspecified sites	M	7	19	22	21	25
	F	5	17	25	26	17
Total	M	230	252	355	377	418
	F	177	228	246	315	292

continued next page

Deaths from Malignant Neoplasms, (a) Tasmania—continued

Site of disease	Sex	1960	1970	1979	1980	1981
Death rate per 100 000 of mean population		117	124	p 143	p 163	p 166
Deaths as a percentage of deaths from all causes		15.2	15.1	19.0	20.4	21.4

(a) List items 140-204 in 1960; 140-207 in 1970; 140-208 from 1979.

(b) In 1960, listed as 'Bladder and other urinary organs'.

EXPECTATION OF LIFE AND LIFE TABLES

Previously, reference was made to the limitations of crude death rates as a measure of mortality. However, a correct measurement of the mortality of the population can be obtained from life tables.

A life table is, in effect, a mathematical model, its starting point being a hypothetical population (say 100 000) of newly-born males or females. Using data for a given period (e.g. single year age distribution of an actual population, deaths at single ages, etc.), the compiler calculates the theoretical number of survivors at each age in the hypothetical population until there are no survivors remaining. For the method of calculating life expectancy see previous issues of the *Tasmanian Year Book*.

The next table gives the number of survivors (l_x values) and complete expectation of life (e^o_x values) for Australian males:

Australia: Life Tables, 1975-77
Survivors (l_x) and Complete Expectation of Life (e^o_x)
Males

Age x	l_x	e^o_x	Age x	l_x	e^o_x	Age x	l_x	e^o_x
0	100 000	69.56	40	94 004	32.81	80	28 105	5.95
1	98 499	69.62	41	93 753	31.90	81	25 057	5.62
2	98 382	68.70	42	93 476	30.99	82	22 112	5.30
3	98 302	67.76	43	93 168	30.09	83	19 298	5.00
4	98 235	66.80	44	92 827	29.20	84	16 642	4.72
5	98 185	65.83	45	92 449	28.32	85	14 167	4.45
6	98 141	64.86	46	92 030	27.44	86	11 894	4.21
7	98 102	63.89	47	91 568	26.58	87	9 839	3.99
8	98 066	62.91	48	91 059	25.73	88	8 010	3.79
9	98 034	61.93	49	90 498	24.88	89	6 415	3.61
10	98 004	60.95	50	89 881	24.05	90	5 051	3.45
11	97 973	59.97	51	89 205	23.23	91	3 912	3.31
12	97 942	58.99	52	88 467	22.42	92	2 982	3.19
13	97 907	58.01	53	87 662	21.62	93	2 239	3.09
14	97 867	57.03	54	86 786	20.83	94	1 657	3.01
15	97 819	56.06	55	85 832	20.06	95	1 213	2.94
16	97 750	55.10	56	84 795	19.30	96	878	2.88
17	97 645	54.16	57	83 670	18.55	97	631	2.83
18	97 493	53.24	58	82 449	17.82	98	449	2.77
19	97 291	52.35	59	81 128	17.10	99	318	2.72
20	97 080	51.47	60	79 698	16.40	100	224	2.67
21	96 885	50.57	61	78 155	15.71	101	156	2.62
22	96 707	49.66	62	76 494	15.04	102	108	2.58
23	96 544	48.74	63	74 710	14.39	103	75	2.53
24	96 392	47.82	64	72 799	13.75	104	51	2.48
25	96 251	46.89	65	70 760	13.13			
26	96 117	45.95	66	68 590	12.53			
27	95 988	45.01	67	66 291	11.95			
28	95 863	44.07	68	63 865	11.38			
29	95 741	43.13	69	61 317	10.84			

continued next page

Australia: Life Tables, 1975-77
Survivors (l_x and Complete Expectation of Life (e^o_x))
Males—continued

Age x	l_x	e^o_x	Age x	l_x	e^o_x	Age x	l_x	e^o_x
30	95 619	42.18	70	58 654	10.31			
31	95 497	41.24	71	55 883	9.79			
32	95 370	40.29	72	53 012	9.30			
33	95 239	39.35	73	50 051	8.82			
34	95 101	38.40	74	47 012	8.35			
35	94 953	37.46	75	43 908	7.91			
36	94 795	36.52	76	40 757	7.48			
37	94 623	35.59	77	37 578	7.07			
38	94 436	34.66	78	34 392	6.68			
39	94 231	33.73	79	31 226	6.31			

The following table shows the l_x and e^o_x values for Australian females:

Australia: Life Tables, 1975-1977
Survivors (l_x and Complete Expectation of Life (e^o_x))
Females

Age x	l_x	e^o_x	Age x	l_x	e^o_x	Age x	l_x	e^o_x
0	100 000	76.56	40	96 636	38.67	80	50 524	7.58
1	98 816	76.47	41	96 480	37.73	81	46 994	7.11
2	98 720	75.55	42	96 309	36.79	82	43 338	6.67
3	98 657	74.60	43	96 119	35.87	83	39 595	6.25
4	98 614	73.63	44	95 910	34.94	84	35 805	5.86
5	98 576	72.66	45	95 680	34.03	85	32 020	5.49
6	98 544	71.68	46	95 428	33.11	86	28 292	5.15
7	98 515	70.70	47	95 152	32.21	87	24 674	4.83
8	98 490	59.72	48	94 851	31.31	88	21 219	4.54
9	98 468	68.73	49	94 524	30.42	89	17 976	4.27
10	98 447	67.75	50	94 170	29.53	90	14 986	4.02
11	98 427	66.76	51	93 785	28.65	91	12 285	3.79
12	98 408	65.78	52	93 369	27.77	92	9 895	3.59
13	98 386	64.79	53	92 919	26.91	93	7 829	3.41
14	98 361	63.81	54	92 432	26.04	94	6 082	3.25
15	98 332	62.82	55	91 906	25.19	95	4 640	3.11
16	98 296	61.85	56	91 337	24.34	96	3 477	3.00
17	98 251	60.88	57	90 722	23.51	97	2 559	2.90
18	98 198	59.91	58	90 056	22.68	98	1 852	2.82
19	98 137	58.95	59	89 336	21.85	99	1 319	2.77
20	98 080	57.98	60	88 558	21.04	100	933	2.72
21	98 027	57.01	61	87 717	20.24	101	656	2.67
22	97 977	56.04	62	86 808	19.45	102	458	2.62
23	97 928	55.07	63	85 824	18.66	103	317	2.57
24	97 879	54.09	64	84 758	17.89	104	219	2.53
25	97 829	53.12	65	83 605	17.13			
26	97 779	52.15	66	82 357	16.38			
27	97 728	51.18	67	81 006	15.65			
28	97 675	50.20	68	79 547	14.93			
29	97 621	49.23	69	77 971	14.22			
30	97 563	48.26	70	76 272	13.52			
31	97 503	47.29	71	74 443	12.84			
32	97 438	46.32	72	72 472	12.18			
33	97 369	45.35	73	70 348	11.53			
34	97 293	44.39	74	68 061	10.90			
35	97 210	43.43	75	65 600	10.29			
36	97 117	42.47	76	62 956	9.70			
37	97 015	41.51	77	60 125	9.13			
38	96 902	40.56	78	57 105	8.59			
39	96 776	39.61	79	53 901	8.07			

The statistics in the above tables have been extracted from tables produced by the Commonwealth Actuary, the source data being supplied by the Australian Statistician and comprising: (i) the number of males and females living at each age last birthday, as shown by the 1976 Census; and (ii) the number of male and female deaths at each age (last birthday) in the years 1975, 1976 and 1977.

True Death Rates

From a life table, the total number of years lived by the original population of 100 000 can readily be calculated. In the case of the 1975-77 male life table, the total number of years lived was 6 956 000. It follows that the death rate of this population may be expressed as:

$$\frac{100\ 000}{6\ 956\ 000} \times \frac{1\ 000}{1} \text{ per } 1\ 000 \text{ years lived;}$$

i.e. 14.376 deaths per 1 000 years lived.

Life table experience can be regarded as the experience of a cross section of the population in a *single year* and the above calculation derives what is known as a 'true death rate' (the true death rate for the 1975-77 male population was 14.38 deaths per 1 000 persons per annum). The true death rate is thus the reciprocal of the complete expectation of life of a person at birth multiplied by 1 000.

The true death rate for a given period is unaffected by the particular age distribution of that period, and is determined solely by the mortality experience of the period as manifested in the rate of survival from each year of age to the next. The table below sets out complete expectation of life at birth and true death rates for the periods covered by the Australian life tables:

Australian: Complete Expectation of Life at Birth and True Death Rates

Period	Complete expectation of life at birth (years)		True death rate (a)	
	Males	Females	Males	Females
1881-1890	47.20	50.84	21.19	19.67
1891-1900	51.06	54.76	19.58	18.26
1901-1910	55.20	58.84	18.12	17.00
1920-1922	59.15	63.31	16.91	15.80
1932-1934	63.48	67.14	15.75	14.89
1946-1948	66.07	70.63	15.14	14.16
1953-1955	67.14	72.75	14.89	13.75
1960-1962	67.92	74.18	14.72	13.48
1965-1967	67.63	74.15	14.79	13.49
1970-1972	68.10	74.80	14.68	13.37
1975-1977	69.56	76.56	14.38	13.06

(a) Number of deaths per 1 000 in stationary (or life table) population in one year.

Further References

ABS Publications Produced by the Tasmanian Office:

- Compendium of Local Government Area Statistics (1304.6), 1982 released December 1982.
- Census of Population and Housing 30 June 1981, Characteristics of Persons in Hobart Suburbs (2201.6).
- Census of Population and Housing 30 June 1981, Characteristics of persons in Launceston Suburbs (2202.6).
- Demography, Tasmania (3101.6), 1981.
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- Causes of Death, Tasmania (3301.6), annual.
- Divorces, Tasmania (3302.6), annual.

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Census of Population and Housing, 30 June 1981: Persons and Dwellings in Local Government Areas and Urban Centres, Tasmania (2406.0), released June 1982.

Census of Population and Housing, 30 June 1981: Summary Characteristics of Persons and Dwellings, Tasmania (2440.0), released December 1982.

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Divorces (3307.0), annual.

Social Indicators (4101.0), biennial.

Other Publications:

Australian Life Tables 1975-77 (Australian Government Actuary, Canberra).

Obstetric and Neonatal Report, Tasmania (produced annually by the State Committee of the Royal College of Obstetricians and Gynaecologists and the Department of Obstetrics and Gynaecology, University of Tasmania, 1978 issue released in September 1979).

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CHAPTER 7

EDUCATION, LIBRARIES AND THE ARTS

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Chapter 7

EDUCATION, LIBRARIES AND THE ARTS

SCHOOL EDUCATION

Introduction

In 1869 Tasmania became the first colony in the British Empire to make education compulsory. The ages for obligatory attendance at school were progressively widened: in 1898 school attendance was made obligatory between the ages of seven and thirteen years; in 1912 between six and fourteen years; and in 1946 Tasmania became the only Australian state to make attendance compulsory up to the age of sixteen, the starting age being six.

Since 1945 the task of Tasmanian educational authorities, as in other Australian states, has been to provide more schools, more teachers, better facilities and cater for a wider range of curriculum offerings. The principal factors exerting these pressures were:

- (i) a rapidly growing school population;
- (ii) changed attitudes to education resulting in increased demands for secondary and tertiary education; and
- (iii) general community acceptance of the need for better education.

In recent years the pressures have changed with a rapid growth in unemployment, a shrinking job market and technological changes placing new demands on education systems. In addition, Federal Governments have accepted a greater financial responsibility through the Commonwealth Schools Commission and the Tertiary Education Commission.

Schools, Government and Non-Government

Education in Tasmania is now provided at primary, secondary and tertiary levels by government institutions and to secondary level by non-government schools. A period of 82 years in which the State accepted no financial responsibility for non-government education ended in 1967 when amendments to the *Education Act* 1932 allowed government grants to independent schools. The assistance is paid on a capitation basis and is dependent upon the level of schooling of the pupil.

In 1946 the Tasmanian Government and non-government systems of education were reorganised to provide a three, four or five-year post primary course. (The pre-war system of secondary education had comprised two stages, a three-year course followed by a two-year course; with a leaving age of 14, and with *selective entry* to government high schools. The proportion of pre-war pupils taking secondary education was very low.)

The dual nature of educational responsibility in Tasmania and the numbers of pupils in both government and non-government schools, in primary and secondary grades, are shown in the following table:

Government and Non-Government Schools, Tasmania
Pupils Enrolled at 1 July (a) According to Grade of Education
(Number)

Particulars	1976	1977	1978	1979	1980	1981
Government schools—						
Primary grades (b)	50 091	50 358	50 910	50 487	50 217	48 549
Secondary grades	30 183	29 616	28 843	28 193	27 512	27 311
Special (c)	908	898	829	857	882	915
Total	81 182	80 872	80 582	79 537	78 611	76 775

Government and Non-Government Schools, Tasmania
Pupils Enrolled at 1 July (a) According to Grade of Education
 (Number)—*continued*

<i>Particulars</i>	1976	1977	1978	1979	1980	1981
Non-government schools—						
Primary grades (b)	8 183	8 168	8 308	8 400	8 576	8 725
Secondary grades	6 221	6 258	6 356	6 312	6 393	6 598
Special (c)	27	20	24	26	—	
Total	14 431	14 446	14 688	14 738	14 969	15 323
Total all schools	95 613	95 318	95 270	94 275	93 580	92 098

(a) From 1980; previously 1 August.

(b) Includes kindergarten classes; see text below.

(c) Includes pupils in special classes attached to ordinary schools.

Kindergarten Classes and Preparatory Classes

In this chapter, the term *kindergarten* is used to describe all pre-school classes, irrespective of whether they operate attached to other schools or whether they operate as separate entities. Separate figures are shown in a later table for enrolments in kindergartens. *Preparatory* classes, which commenced in 1974, are included in 'Primary grades'.

The State (or Government) School System

Organisation

The *Education Act* of 1885 established an Education Department headed by a Director of Education responsible to a Minister. In the present system professional and administrative functions are vested by the *Education Act (1932-1982)* in the Director-General who is responsible to the Minister for Education. The Director-General is assisted by a professional organisation consisting of a Deputy Director-General, six divisional directors plus central and regional administrative units.

Day to day administration of schools and colleges is organised on a regional basis. The three Regional Directors (North, North-West and South) are responsible to the Director-General and have their headquarters in Launceston, Burnie and Hobart respectively. They are supported by superintendents with experience and responsibilities in the Early Childhood, Primary and Secondary Sectors. Their offices are also responsible for a wide range of services to schools, colleges and the community.

Within the central office the Secretary is responsible to the Director-General for the provision of administrative and clerical support. This support includes the following functions: finance and accounts, transport and property, supply of materials and equipment, personnel, registry services, secretarial services and records.

Following a *Review of Efficiency and Effectiveness* a major reorganisation of the Educational Department commenced in 1983.

The School System

Education in Tasmania is based on a neighbourhood school approach. It is compulsory between the ages of six and 16 although special exemptions may be obtained. Education is secular and free but most parents either purchase or contribute towards purchase of books, materials, and some equipment. Transport to school is either provided by the Department (generally in rural areas) or subsidised where daily costs on public transport exceeds 60 cents. Children may commence full time education in a preparatory grade after which there is a general pattern of schooling made up of six years of primary education followed by six years of secondary education.

Expenditure on Education

The following table shows educational expenditure by the State Government from the public account; expenditure from Trust Funds is made by the State acting mainly as agent for the Federal Government.

Expenditure on Education from Consolidated Revenue, Loan Fund and Trust Funds, Tasmania (\$'000)

<i>Particulars</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
From Consolidated Revenue—			
General administration, regulation and research .	r 11 992	13 422	13 589
Student transport	5 250	6 087	6 790
Primary and secondary	95 639	109 039	122 273
Technical	11 055	13 529	16 105
University	132	88	101
Other higher education	6 371	5 519	4 378
Special schools	2 607	3 091	3 342
Adult education	—	—	1 300
Other	r 14	51	88
Total	133 061	150 824	167 966
From Loan Fund—			
General administration, regulation and research .	8 128	7 959	5 795
Primary and secondary (including pre-school)	10 767	9 898	8 872
Technical	4 009	7 399	8 036
University	—	—	500
Other higher education	—	—	—
Adult education	49	—	—
Special schools	234	60	—
Total	23 187	25 317	23 202
From Trust Funds—			
General administration, regulation and research .	144	1	1
Primary and secondary	6 554	6 481	7 823
University	19 637	21 381	25 741
Other higher education	13 688	11 606	10 361
Adult education	24	6	—
Other	785	789	2 257
Total	40 833	40 265	46 183
Grand total	197 080	216 406	237 350

It should be noted that the preceding table includes amounts voted under other departmental heads for the provision of educational facilities, principally rental and tenancy charges and water, sewerage and other rates paid by the Lands Department.

Enrolment

Enrolments in Government schools for the last six years were:

Government Schools, Tasmania						
Number of Pupils at 1 July (a)						
<i>Pupils</i>	<i>1976</i>	<i>1977</i>	<i>1978</i>	<i>1979</i>	<i>1980</i>	<i>1981</i>
Boys	41 806	41 628	41 432	40 955	40 377	39 409
Girls	39 376	39 244	39 150	38 582	38 234	37 366
Total	81 182	80 872	80 582	79 537	78 611	76 775

(a) From 1980; previously 1 August.

Age of Pupils in Each Class

The following table summarises the system of government schooling in Tasmania showing the average ages of pupils in each grade and the type of certificate issued for final year examinations:

Government Schools, Tasmania
Average Ages of Pupils, Primary and Secondary, in Each Grade, and Certificates Issued

Primary classes			Secondary classes			
Grade	Mean age at 1.7.81		Grade	Mean age at 1.7.81		Certificate issued
	Years	Months		Years	Months	
Kindergartens—						
Separate	4	10	7	12	8	..
Attached	5	0	8	13	8	..
Preparatory	5	7	9	14	8	Preliminary School Certificate
1	6	7	10	15	7	
2	7	7	11	17	5	School Certificate Higher School Certificate
3	8	8	12	18	4	
4	9	8				
5	10	8				
6	11	8				

Number of Government Schools

The following table shows the number of government schools in Tasmania:

Number of Government Schools, Tasmania, at 1 July (a)						
Type of school	1976	1977	1978	1979	1980	1981
Kindergartens (separate)	34	33	36	35	32	32
Primary (b)	153	155	159	160	167	169
Special	19	18	19	20	23	24
District (c)	39	9	10	7	2	1
District High (d)	—	27	25	25	25	25
High	33	35	35	35	34	34
Secondary colleges ..	7	7	7	7	5	3
Community colleges ..	—	—	—	—	3	5
Total	284	284	291	289	291	293

(a) From 1980; previously 1 August.

(b) Many have kindergartens attached.

(c) Includes one school classified as primary with secondary top.

(d) The secondary facilities of these schools are being upgraded to full high school standard.

Kindergarten Education

Within the general pattern of primary education Tasmania provides four years of early childhood education. Until 1969, pre-schools were established on the initiative of groups of parents. The Department provided buildings but eventually recovered half its outlay from parents. Commencing in 1969 all new facilities for pre-school education were provided in kindergartens attached to primary schools. At present there are kindergartens which are part of primary schools and others which are not attached to primary schools. Policy aims to provide kindergarten for children who are four years and over on January 1 of any given year. Age of entry to preparatory classes is 5, and 5½ to 6 to year 1.

Enrolments in Kindergartens, Tasmania, at 1 July (a)						
Particulars	1976	1977	1978	1979	1980	1981
Kindergartens—						
Separate	1 486	1 398	1 533	1 388	1 116	1 043
Attached	5 163	5 224	5 347	5 103	5 163	4 800
Total (b)	6 649	6 622	6 880	6 491	6 279	5 843

(a) From 1980; previously 1 August.

(b) Included in other tables as part of total government school enrolments.

State Primary Schools

Primary schools seldom enrol more than 600 pupils and are located close to pupils' place of residence. Most have six grades in addition to kindergarten and a preparatory class. In rural areas either small primary schools, district or district high schools have primary years and draw many pupils from outlying localities. Free transport has made this possible and is an example of the high priority given to meeting the educational needs of children in rural areas. Classes are usually heterogenous with teachers devising programs for children of various ability levels. Pupils progress on an age/year basis rather than on promotion by ability. The ages and numbers of pupils receiving primary education in Government Schools are as follows:

Ages and Numbers of Pupils Receiving Government Primary Education (a), Tasmania, at 1 July (b)

Age last birthday (years)	1976	1977	1978	1979	1980	1981
Under 5	2 392	2 633	3 156	3 073	3 580	3 209
5	6 456	6 356	6 286	5 998	5 880	5 697
6	6 749	7 034	6 655	6 411	6 202	5 972
7	6 953	6 828	7 018	6 622	6 382	6 079
8	6 736	6 934	6 774	6 978	6 766	6 352
9	6 369	6 631	6 941	6 674	6 928	6 732
10	6 186	6 260	6 520	6 925	6 720	6 904
11	6 269	5 954	5 996	6 244	6 338	6 317
12	1 869	1 644	1 502	1 511	1 322	1 240
13	108	83	59	50	97	46
14	4	8	3	1	2	1
15 and over	8	1	8	8	—	—
Total—Boys	25 822	25 892	26 258	26 147	25 978	25 132
Girls	24 269	24 466	24 652	24 340	24 239	23 417
Total pupils	50 091	50 358	50 910	50 487	50 217	48 549

(a) Includes kindergarten classes; excludes pupils in special schools and classes.

(b) From 1980; previously 1 August.

Primary Curriculum: The primary school curriculum is designed to cater for the intellectual, physical, social, and emotional development of children during their critical formative years. The curriculum emphasises acquisition of basic language, writing and number skills within the wider context of developing a capacity to communicate, think and value. The schools task is to provide programs that enable each pupil to develop skills appropriate to their stage of development and that will foster further learning. These programs also provide for creativity, arouse the imagination, as well as giving the opportunity to develop initiative and logical thought processes.

Special Schools and Special Classes

General policy is directed towards integrating children with special needs into normal schools. Special Schools provide for children with different forms of handicap and who are unable to benefit from instruction in normal schools.

Instruction varies according to the type of handicap and where it is physical the main need is to maintain normal or near normal individual programs. Schools and classes for intellectually handicapped children follow a program that is tailored to meet individual needs.

A Superintendent of Special Education has Statewide responsibilities in this field and is supported in each region by the superintendents.

Government Secondary Schools

Almost all children attend secondary classes starting at an age ranging from 11½ to 13 years. The first four years of secondary education (grades 7 to 10 inclusive) are catered

for in high schools or district high schools, which are non-selective, comprehensive, and provide a broad general education. All, with the exception of two high schools in Hobart, are co-educational. The final two years (grades 11 and 12) are completed in a secondary college. Their operation is outlined later under Further Education.

All high schools have a number of feeder primary schools. Pupils enter high school at the end of grade 6. In the first two years (grades 7 and 8), emphasis is on a general education. This becomes more specialised in the final two years (grades 9 and 10). Many schools use ability grouping in subjects at this level to allow development of programs suited to particular pupils.

The age and number of pupils, by grade and sex, attending government secondary schools are shown by the following tables: (Note: The figures include grade 11 and 12 pupils who attend secondary colleges.)

Pupils Receiving Government Secondary Education (a), Tasmania, at 1 July (b) by Age

Age last birthday (years)	1976	1977	1978	1979	1980	1981
10	—	—	—	—	1	—
11	188	159	210	205	364	212
12	4 920	4 687	4 199	4 588	4 793	5 284
13	6 623	6 539	6 141	5 790	5 967	6 091
14	6 971	6 723	6 736	6 273	5 948	5 887
15	6 630	6 356	6 153	6 229	5 791	5 439
16	2 993	3 073	3 246	2 892	2 647	2 286
17	1 240	1 408	1 457	1 423	1 288	1 362
18 and over	618	771	701	793	713	750
Total—Boys	15 414	15 179	14 680	14 296	13 869	13 722
Girls	14 769	14 437	14 163	13 897	13 643	15 589
Total pupils	30 183	29 616	28 843	28 193	27 512	27 311

(a) Excludes pupils in special schools and classes.

(b) From 1980; previously 1 August.

The next table shows the number of secondary pupils by sex and grade in all government schools:

Secondary Pupils in Government Schools, Tasmania, at 1 July (a) by Grade

Year	Secondary grade						Total
	7	8	9	10	11	12	
Boys							
1976	3 602	3 575	3 576	2 925	907	829	15 414
1977	3 390	3 604	3 458	2 979	902	846	15 179
1978	3 153	3 397	3 485	2 968	883	794	14 680
1979	3 151	3 103	3 351	3 036	857	798	14 296
1980	3 115	3 119	3 064	2 967	819	785	13 869
1981	3 342	3 073	3 051	2 641	890	725	13 722
Girls							
1976	3 317	3 319	3 292	2 850	1 180	811	14 769
1977	3 149	3 289	3 177	2 814	1 134	874	14 437
1978	2 967	3 094	3 224	2 799	1 206	873	14 163
1979	2 941	2 945	3 024	2 847	1 142	998	13 897
1980	2 895	2 934	2 891	2 766	1 177	980	13 643
1981	3 120	2 873	2 877	2 668	1 095	956	13 589

(a) From 1980; previously 1 August.

Current policy is directed towards educating children in their local communities. There has been positive discrimination towards country children and steps have been taken

to make the secondary education available in district high schools comparable with that provided in urban high schools. A few isolated schools still have a small secondary population and parents who wish their children to have a wider range of opportunities than can be provided locally may, on the approval of a Transfer Committee, enrol children in high schools. These students board in departmental hostels in larger centres. Assistance, through conveyance allowances, may be provided by the Department.

The high school curriculum provides a general, comprehensive education within a framework of subjects endorsed by the Schools Board of Tasmania. Most grade 7 and 8 pupils follow a common course, developed by the school, and suited to their needs. In grades 9 and 10 a wide range of academic, technical and cultural subjects provide the basis for pupils to choose a program that satisfies School Certificate requirements as well as allowing them to follow personal interests. Subjects are generally assessed at three levels but some are only offered at the most demanding level 3 and others are not offered beyond level 2.

Teaching Methods and School Design

In recent years the school curriculum has undergone considerable change both in subject matter and teaching methods. While schools have responsibility for developing their own curriculum they operate within subject guidelines and Schools Board requirements.

Teaching methods also reflect the changed nature of learning with teachers using a wide variety of teaching approaches, materials and equipment. This allows school programs to be adapted to meet the varying needs, abilities and interest of pupils. Grouping in schools can be on an age, year or ability basis with promotion generally being according to age. Some schools have adopted composite grading which allows pupils, in certain subjects, to work at their own level of competence.

School design has also adapted to cater for the variety of teaching approaches. Current policy requires new primary schools of a standard plan with single and dual classrooms, annexes for small groups and larger general purpose areas. Most schools have also adapted classroom spaces to allow for a more flexible organisation of the learning program.

Assessment and Certification

As a result of the proposals of the Schools Board and the *Radford Report*, the Schools Board was re-constituted with a membership of 21 on 1 September 1966, to allow the Board to become, in 1969, the sole examining and certifying body at the secondary level. A further amendment to the Act in 1974 made provision for the Council of Advanced Education to nominate members, and increased the membership of the Board to 23 as from 1 July 1974.

An important change of considerable significance to employers, and to the prerequisites they demand of applicants for employment, occurred when new types of certificates were introduced in 1969. There are only two such certificates issued, known as the School Certificate and the Higher School Certificate. These replaced all previous certificates which were group certificates demanding, in varying degrees of detail, certain compulsory subjects or groups of subjects as prerequisites to the award of the certificate. The essential difference is that both of the new certificates are subject certificates requiring no compulsory subjects or groups of subjects to be studied.

The School Certificate

The subjects for this certificate may be taken at various levels and a wide choice is available to cater for different levels of ability and interest. A preliminary award may be granted to those candidates who leave school without qualifying for a full award in a subject. The full award will be granted to candidates who successfully complete the full syllabus in a subject. The certificate will be awarded as a result of a system of regional

moderation which has been developed to ensure comparability of standards between schools.

The Higher School Certificate

Candidates normally sit for Higher School Certificate subjects at the end of the fifth and sixth years of secondary education. The certificate is awarded as a result of assessments completed in November each year. Subjects may be studied at Level II or Level III, but both levels are not necessarily available for all subjects.

From 1982 awards in all Level III subjects have been determined by a combination of an external examination component and a standardised school assessment component. The weighting of the standardised school component must be not less than 25 per cent and not more than 50 per cent of the final result. The exact percentage of the weighting is determined by the Schools Board of Tasmania on the recommendation of the appropriate Subject Committee.

Syllabuses in subject areas offered at Level II where a Level III syllabus also exists provide for those who wish to take a terminal course in a subject as well as for those who require a foundation course before proceeding to the study of a Level III subject. In any one year no candidate may enter for both a Level II subject discussed above and the Level III subject in the same subject field.

Requirements for matriculation are determined by the University of Tasmania from the results of the Higher School Certificate assessments conducted by the Schools Board of Tasmania.

Non-Government (or Independent) Schools

Non-government schools have played a valuable part in Tasmanian education. Policies are framed by principals in conjunction with their senior staff and with the approval of their governing bodies or church.

Registration

Non-government schools and teachers are subject to the regulations of the Teachers and Schools Registration Board. This Board consists of nine members who hear and determine all applications for registration and keep a record of all teachers and schools not administered by the Education Department. Every school is graded and teachers are registered in one or more classifications or as special subject teachers. 'Provisional' teachers are those gaining qualifications so they can be registered. The Board may prescribe the mode of classifying teachers, the course of study and training required, the examinations to be passed, and the recognition of overseas qualifications. To secure registration, schools must provide for proper access, drainage, light, ventilation and sanitary conveniences, and inspections may be made by officers appointed by the Board. A daily register of attendance has to be kept.

State Assistance to Non-Government Schools and Pupils

The *Education Act* 1932 was amended in 1967 to provide for direct payments to non-government schools. Currently the total level of assistance is calculated by taking 23 per cent of the estimated costs of educating a pupil in Government primary and secondary schools and multiplying the amount by the number of pupils registered in non-government schools at 1 August each year. In 1981-82 this expenditure amounted to \$5 447 173. Additional assistance is paid to help schools in meeting interest payments on certain loans. The amount of the subsidy in 1981-82 was \$300 000. From the beginning of 1970 the Federal Government also provided per capita grants to independent schools. Details are contained in a later section dealing with Federal Government Activities in education.

Apart from these subsidies, benefits include: free or subsidised transport; use of the facilities of the Department's curriculum centre, media centre, and speech education and guidance branches; attendance at trade and domestic science classes if room is available; and attendance by teachers at Departmental schools of method.

Enrolment at Non-Government Schools

Most non-government school pupils are in schools controlled by religious denominations, as the next table shows:

Pupils Enrolled in Non-Government Schools Tasmania, at 1 July (a)
(Number)

		<i>Church of England</i>	<i>Uniting Church (b)</i>	<i>Catholic</i>	<i>Seventh- day Adventist</i>	<i>Other schools</i>	<i>All schools</i>
		<i>Pupils</i>					
1976	Boys	889	211	4 723	85	1 038	6 946
	Girls	805	331	5 113	86	1 150	7 485
1977	Boys	906	213	4 680	92	1 016	6 907
	Girls	807	341	5 204	77	1 110	7 539
1978	Boys	929	211	4 745	72	1 013	6 970
	Girls	851	375	5 351	83	1 058	7 718
1979	Boys	958	287	4 741	88	861	6 935
	Girls	850	583	5 467	82	821	7 803
1980	Boys	1 057	274	4 778	89	915	7 113
	Girls	808	577	5 467	89	915	7 856
1981	Boys	1 101	285	4 872	99	1 025	7 382
	Girls	801	613	5 481	96	950	7 941
		<i>Schools</i>					
1981		4	3	37	4	20	68

(a) From 1980; previously 1 August.

(b) From 1979; previously Presbyterian.

The following table shows the number of secondary pupils by sex and class in all non-government schools:

Secondary Pupils in Non-Government Schools, Tasmania, at 1 July 1981, by Year

<i>Pupils</i>	<i>Secondary year</i>						<i>Total</i>
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	
Boys	689	696	600	575	207	289	3 056
Girls	804	716	696	724	369	233	3 542
Total	1 493	1 412	1 296	1 299	576	522	6 598

Of the 27 schools in 1980 which catered for secondary pupils, 15 had Higher School Certificate classes.

Most non-government school pupils are to be found in primary classes, and most of them are in Catholic schools. The following table shows the numbers and ages of all pupils in non-government school primary and sub-primary classes:

Pupils Receiving Non-Government Primary Education, Tasmania, at 1 July (a) by Age

<i>Age at last birthday (years)</i>	<i>1976</i>	<i>1977</i>	<i>1978</i>	<i>1979</i>	<i>1980</i>	<i>1981</i>
Under 7	2 737	2 603	2 470	2 322	2 400	2 416
7	1 039	1 079	1 164	1 136	1 134	1 107
8	997	1 061	1 120	1 176	1 173	1 173
9	960	1 061	1 096	1 199	1 225	1 208
10	1 020	1 040	1 114	1 136	1 202	1 306
11	1 091	1 005	1 077	1 118	1 208	1 246
12	312	302	253	298	232	249
13	25	16	12	15	2	20

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Pupils Receiving Non-Government Primary Education, Tasmania, at 1 July (a) by Age—continued

<i>Age at last birthday (years)</i>	1976	1977	1978	1979	1980	1981
14 and over	2	1	2	—	—	—
Total—Boys	4 024	4 018	4 072	4 040	4 160	4 326
Girls	4 159	4 150	4 236	4 360	4 416	4 399
Total pupils	8 183	8 168	8 308	8 400	8 576	8 725

(a) From 1980; previously 1 August.

The following table shows the ages of pupils in non-government schools at secondary level:

Pupils Receiving Non-Government Secondary Education, Tasmania, at 1 July (a) by Age

<i>Age last birthday (years)</i>	1976	1977	1978	1979	1980	1981
11 and under	101	76	69	65	121	94
12	991	980	1 047	1 000	1 144	1 285
13	1 266	1 322	1 292	1 257	1 307	1 393
14	1 415	1 367	1 316	1 236	1 314	1 338
15	1 234	1 268	1 271	1 347	1 262	1 248
16	732	809	813	847	768	780
17	403	381	458	445	391	390
18 and over	79	55	90	115	86	70
Total—Boys	2 913	2 877	2 892	2 882	2 953	3 056
Girls	3 308	3 381	3 464	3 430	3 440	3 542
Total pupils	6 221	6 258	6 356	6 312	6 393	6 598

(a) From 1980; previously 1 August.

Teachers and Teacher Training

There is a variety of teacher training courses available to trainee teachers in this State. The University of Tasmania awards the Diploma of Education after a one-year post-graduate course in which graduate students train as infant, primary or secondary teachers. Since 1975, a four-year course leading to the degree of Bachelor of Education has been provided and a Master's degree is also offered. There is also a post-graduate course leading to the degree of Bachelor of Special Education.

The Tasmanian College of Advanced Education provides both a three-year course leading to a Diploma of Teaching and a four-year Bachelor of Education course. A course is provided for full-time and part-time graduate students leading to the degree of Master of Education. Large numbers of practising teachers also enrol in courses with the Centre for Continuing Education of Teachers thereby gaining extra qualifications which may lead to diplomas and degrees.

The Department provided studentships for teacher training at either the University of Tasmania or the Tasmanian College of Advanced Education. Since 1980 there has been a considerable reduction in the number offered and in 1983 there were no new studentships. Training institutions continue to enrol the number of students predicted to be required by Tasmanian schools.

The following table shows the number of teachers and instructors in Tasmanian Government schools (excluding technical colleges):

Number of Government School Teachers and Instructors (a), Tasmania, at 1 July 1981

<i>Type of school</i>	<i>Full-time</i>			<i>Part-time and casual</i>		
	<i>Males</i>	<i>Females</i>	<i>Persons</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>
Kindergarten	4	172	176	—	20	20
Special	40	85	125	—	51	51
Primary	472	1 556	2 028	77	182	259

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*Derwent River, near
New Norfolk*

*(Tasmanian Government
Stills Photographic Section)*



*Autumn colours, Anglesea
Barracks, Hobart*

AUTUMN IN TASMANIA

*Fox-hunt in the Midlands
(Tasmanian Government
Stills Photographic Section)*



Ross Bridge over Macquarie River.

Edward Gall



Number of Government School Teachers and Instructors (a), Tasmania, at 1 July 1981—continued

Type of school	Full-time			Part-time and casual		
	Males	Females	Persons	Males	Females	Persons
District—						
Primary	1	1	2	—	—	—
Secondary	1	1	2	1	3	4
District High—						
Primary	75	172	247	23	13	36
Secondary	196	159	355	6	7	13
High	964	729	1 693	15	47	62
Secondary colleges	249	120	369	76	68	144
Total	2 002	2 995	4 997	198	391	589

(a) Excludes teachers in non-teaching positions (e.g. curriculum branch staff, guidance officers, speech education, music and training aid centres).

The following table shows the number of teachers and teachers-in-training in Tasmania:

Full-Time Teaching Staff in Government Schools (a) and Teachers-in-Training, Tasmania, at 1 July (b)

Type of Teacher	1976	1977	1978	1979	1980	1981
Head teachers—						
Males	232	230	218	224	231	229
Females	20	23	29	25	28	20
Other teachers—						
Males	1 549	1 610	1 692	1 669	1 909	1 966
Females	2 795	2 739	2 896	2 848	3 088	3 061
Total teachers (a)—Males	1 781	1 840	1 910	1 893	2 140	2 195
Females	2 815	2 762	2 925	2 873	3 116	3 081
Teachers-in-training—						
Males	445	462	509	527	448	333
Females	1 203	1 215	1 231	1 240	1 073	900

(a) Includes teachers in non-teaching positions (e.g. curriculum branch staff, guidance officers, etc.) but excludes supervisors, those engaged in technical education, part-time teachers, and those on long service leave.

(b) From 1980; previously 1 August.

In primary schools in 1981, 77 per cent of the full-time teachers were females. All subjects are taught by each teacher in these schools but itinerant teachers, when available, take physical education, music and speech classes on a circuit basis with each teacher being responsible for the teaching of the subject in several schools. In the post-primary schools, most teachers are specialists attached to subject departments within each school. In the district high schools, because of the smaller numbers of secondary pupils one teacher may take several subjects; rural science, home arts and crafts and technical subjects are usually handled by resident or itinerant specialists.

Teacher Training: Numbers of teachers-in-training for recent years are shown in the next table.

Teachers-in-Training, Tasmania, at 1 July (a)

Institution attended	1977	1978	1979	1980	1981	1982
Males						
University of Tasmania	207	210	195	152	158	115
Tasmanian College of Advanced Education	251	295	329	296	174	123
Specialist trainees	4	4	3	—	1	1
Total	462	509	527	448	333	239

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Teachers-in-Training, Tasmania, at 1 July (a)—continued

<i>Institution attended</i>	1977	1978	1979	1980	1981	1982
<i>Females</i>						
University of Tasmania	389	360	342	244	403	316
Tasmanian College of Advanced Education	804	847	869	813	483	306
Specialist trainees	22	24	29	16	14	11
Total	1 215	1 231	1 240	1 073	900	633

(a) From 1980; previously 1 August.

FURTHER EDUCATION

From the beginning of January 1979 the two sectors of Technical and Further Education and Secondary Colleges were brought together to form a reconstituted *Division of Further Education* under the control of the Education Department. The Report, *Further Education in Tasmania*, set the foundations for the development of community colleges and an increased regional approach to Further Education. As a result, Regional superintendents of Further Education were appointed in the North-West, North and South to work with regional co-ordinating committees to further community college development. The State Council for Further Education was established to recommend new directions for further education in Tasmania.

The Division is headed by the Director of Further Education, who is supported by a Deputy Director and a Senior Superintendent. It runs colleges in Hobart, Launceston, Devonport, Burnie and Queenstown which cater for senior secondary, technical and adult education, and a number of separately provided but administratively linked Adult Education Centres. Centres in Smithton, Scottsdale, Campbell Town, Oatlands and Huonville provide a more limited range of course offerings. The following table shows the number of colleges, teachers and students for 1982:

Further Education 1982				
	<i>Technical</i>	<i>Adult Education</i>	<i>Secondary</i>	<i>Total</i>
No. Institutions	7	8	7	22
No. Teachers—				
Full-time	478	(a)17	373	868
Part-time	851	841	137	1 829
No. Students—				
Full-time	1 563	—	2 941	4 504
Part-time	14 900	16 625	(b)461	31 986

(a) Adult Education full-time 'teachers' are primarily administrators.

(b) In addition to the 461 part-time secondary students, there are 850 evening students.

Correspondence Courses are administered through the Hobart Technical College's External Studies Service. They are intended for isolated students and others who are unable to attend regular classes. Many of the Certificate, Trade and H.S.C. courses are available. However, the block training system has replaced a number of the apprentices' courses.

Vocational Courses provide for non apprentice training and include fashion, clothing manufacture, supervision, commercial and secretarial studies.

Teacher Education courses have been available to technical teachers through the Centre for Continuing Education of Teachers on a part-time basis. They include general teaching theory plus the theory and method of trade and vocational teaching. In 1982 an advanced education, UG2 Diploma course for full-time Further Education teachers commenced at the Tasmanian College of Advanced Education (Launceston). This course will enable teachers to up-grade their qualifications to diploma level. In-service education is also available for non-formal staff development and includes seminars, inter-state conferences plus courses and conferences conducted by Tasmanian industrial and commercial organisations.

Examinations are conducted by the Education Department in July and November each year. Papers are set and marked, or assessments carried out on a statewide basis, except for the first and second year trade subjects in which cases each college makes its own arrangements.

Senior Secondary Colleges

Seven senior secondary colleges operate within the State. The first was the Hobart Matriculation College (previously Hobart High School) - no junior students were enrolled after 1961 and by 1965 all students were attempting matriculation. In 1967 Launceston High School reached this stage and in 1968 the Elizabeth Matriculation College, in Hobart, was opened and elimination of junior classes was completed by 1970. In 1973 the newly constructed Rosny College was opened to serve the eastern shore suburbs of Urban Hobart and the new Don College was opened at Devonport. Alanvale College at Launceston was opened in 1975 while the Hellyer College at Burnie was opened in 1976 to replace Higher School Certificate classes previously available at Burnie High School. Originally the prime purpose of these colleges was to concentrate specialist Higher School Certificate teaching in a few centres. The students also benefited from an intermediate step between high school and tertiary education.

In its 1982 election policy on education, the Government gave notice that it intended to separate the provisions of Higher School Certificate (HSC) and Technical Education (TAFE). This policy has been adopted and from the beginning of 1983 in some colleges and 1984 in the remainder, the HSC and TAFE courses will generally be offered separately.

Technical Education

Colleges and Courses

Compulsory schooling ends at age 16 and pupils have a number of choices:

- (i) to try to find employment;
- (ii) to attend a further education college before entering tertiary institutions or the workforce;
- (iii) to combine employment with part-time study at a further education college (as in the case of trade apprentices).

TAFE Certificate courses cater for middle level vocations between the trades and professions. They are designed in consultation with industry to meet the increasing needs of para-professional personnel in areas such as engineering, accounting, child-care and social welfare. On successful completion of a course a certificate is awarded by the Education Department.

Trade courses combine theoretical and practical aspects of the trade and are complementary to employer training given to apprentices. From 1965 apprentices have been required to attend one full day per week for three years and this almost has eliminated evening classes for apprentice training. Since 1968 block training has operated for a number of trades and for apprentices previously taught by correspondence. During the year, periods of two weeks are spent in full-time study in a technical college. These courses are offered in association with the Apprenticeship Commission and a Certificate of Trade Proficiency is awarded upon successful completion of the course. With the instruction of trade courses in farming and horticulture in 1979 the definition of these

courses has been widened. Post trade courses are also available to extend the skills and knowledge of tradesmen.

General admission policy of the colleges is one of 'open door' to most courses and enrolments are of students who have passed the age of compulsory attendance. The majority of students studying HSC subjects are in their fifth and sixth year of secondary education. In recent years there has been a decline in the number of students passing directly from high schools but there has been a considerable increase in mature-age students studying HSC subjects.

The senior secondary colleges have also developed a wide range of offerings not specifically tied to the traditional HSC subjects. These aim to satisfy the needs of the more diverse group of the student population enrolling. Some of these subjects have been incorporated into the HSC Unit Subjects structure being developed by the Schools Board; others have remained college based subjects in the areas of compensatory, pre-vocational and transition education. Colleges, especially those in the Hobart area, have expanded significantly into the area of late afternoon and evening programming of classes for the large number of adult part-time students seeking a range of options from academic HSC to elective and recreational pursuits. In the latter area co-operation with Adult Education has occurred to ensure the appropriate development of a rationalised offering of community education courses. Colleges have greatly expanded their services in the pre-vocational area often with the co-operation of the Technical Colleges. Courses for unemployed youth, work experience programs, transition education courses and increased emphasis on vocational guidance have resulted in the colleges becoming more effective in meeting the needs of those students not wishing to proceed with academic studies.

Councils have now been established for most colleges and these are beginning to demonstrate an increasing degree of community involvement in planning and college governance.

Adult Education

Establishment of a mechanics' institute in Hobart in 1827 was the start of adult education in Australia. Mechanics institutes, later established in other cities, provided public lectures and libraries. The first Tasmanian Workers Education Branch was begun in Hobart in 1913 to promote the higher education of working men and women. For many years the WEA worked in conjunction with the University of Tasmania and provided classes and public lectures.

From 1948 to 1975 adult education was administered by a statutory board established under the *Adult Education Act* 1948. From 1 January 1976, the *Education Act (No. 2)* 1975 came into force, which proclaimed an advisory Adult Education Board and a Division of Adult Education within the Education Department. On 1 January 1979, adult education came under the control of the Division of Further Education.

Hobart has four Adult Education Centres: at the Domain, South Hobart, North Hobart and Rosny College. There is also an inquiries and enrolment centre in the city centre. There are also centres and offices established in Launceston, Devonport, Burnie, Queenstown, Oatlands and Campbell Town.

Operations

An extremely wide variety of courses, ranging in duration from one term to one year, is offered. A function of the Division is to initiate innovatory programs and to respond to changes in community needs. Subject areas include basic education, business studies, foreign languages, arts and crafts and music and dance.

In co-operation with the Federal Department of Immigration and Ethnic Affairs, the Division arranges courses in Hobart in English for migrants and other courses for migrants throughout the State.

The range and number of courses increased significantly in response to the influx of Indo-Chinese refugees. The Adult Migrant Centre has been converted into a self access

learning centre to extend opportunities and encourage migrants to learn English in their own time and at their own pace.

A recent development has been the use of a computer system in the South which has been expanded to include staffing and financial information. Other regions moved towards fully computerised Adult Education enrolments. The outstanding success of this system attracted considerable interest from other States. Demand for adult literacy programs has increased dramatically with an average of 500 trained volunteers providing instruction in one-to-one teaching situations.

A significant development in the Northern Region has been the establishment of a School for Senior Citizens. The program consists of a variety of subjects from English literature to gardening science.

In addition to a diverse summer school program attracting students from throughout Australia the Division is also active in the community arts area. Events such as art exhibitions, music recitals and drama events are often arranged in association with other groups.

Discussion groups are held throughout the State on a monthly basis to study books and other material of educational value. This is a joint service given by the State Library and the Education Department.

'The Grange' Residential College at Campbell Town, with accommodation for 30 students, has been leased from the National Trust since 1964. It is an old colonial country home built in 1848. It is one of only two adult education residential colleges in the country and is recognised by educationalists as an institution of unusual worth.

Activities have expanded markedly with the appointment of a full-time warden. The building is used constantly for weekend courses as well as week-day educational and training programs.

Other Educational Matters

Curriculum Development

In recent years the school curriculum has undergone considerable change both in subject matter and teaching methods. While schools have responsibility for developing their own curriculum they operate within subject guidelines and Schools Board requirements. Following publication of the *Curriculum Task Force Report* (1978) the role of the Curriculum Centre has changed substantially. Three major developments have emerged as high priorities for curriculum activities:

- (i) providing assistance to schools undertaking curriculum development activities;
- (ii) providing leadership and guidance to schools in the area of transition education;
- (iii) assisting a central language development committee and individual schools in the area of language acquisition and language development programs.

The Curriculum Centre's purpose is to facilitate the introduction of new ideas and practices to improve children's learning. Tasks which Centre officers are expected to perform can be grouped as follows:

- (i) special projects;
- (ii) involvement with statewide curricula;
- (iii) facilitating school-based curriculum development;
- (iv) publications and information.

Most officers are involved, at some time, with all of these tasks, which are inter-related and supportive of each other.

The Curriculum Centre provides assistance to committees which have responsibility to develop or revise state or system-wide guidelines. In recent years system initiatives have resulted in the development of guidelines in areas such as primary language, physical education, secondary science, consumer education and handwriting. Also, after trials, a

Legal Studies Course has received full HSC status. The wide appeal and the innovative teaching methods employed has created high enrolments in this course.

Activities of and funding from agencies external to the system, generate a wide variety of curriculum projects in the Centre; for example:

- (i) Transition (school to post-school) Education Project;
- (ii) Work Experience Co-ordination Program;
- (iii) Education for and about Aborigines in Tasmanian Society;
- (iv) Reading in Transition (from primary to high schools);
- (v) Multicultural Education;
- (vi) Health Education;
- (vii) Girls in Education;
- (viii) Antarctic and Southern Ocean Curriculum Project.

Professional Development

The Centre for the Continuing Education of Teachers provides part-time study programs for practising teachers in co-operation with the Education Department, Tasmanian College of Advanced Education and University of Tasmania. Administration of the Centre is undertaken by the Education Department (Services Division) and its formal study program is administered by an executive board representing the Education Department, the institutions providing courses and part-time teaching staff and two teacher organisations.

Courses offered range from basic certification for teachers to advanced level study programs linked with University and TCAE Education Degree courses.

The Department has placed a high priority on development of programs for senior staff. A primary school program commenced in 1980 and is aimed at fostering a better understanding of the education system, of the basic functions and principles of management, to improve confidence and competence in management practices and to enable senior staff to support the development of teachers at the school level.

A similar program for senior-masters and senior-mistresses in secondary schools commenced in 1982. It has been developed in co-operation with the University of Tasmania and the Tasmanian College of Advanced Education. The assistance of those institutions also has been offered in a resource teacher program and a conversion (re-training) course to meet specific system needs.

Other development activities are provided in addition to the CCET courses. These consist of a limited number of longer courses of more than ten days, short courses of one to three days, school-based seminars, inter-school visits by teachers and meetings held out-of-school hours.

Media Services

The Tasmanian Media Centre provides specialised assistance by the development, production, and supply of audio-visual materials and equipment.

The Centre offers the following types of services:

- (i) selection, installation and maintenance of audio-visual equipment in Tasmanian schools;
- (ii) evaluation and purchase of audio-visual media - 16mm films, kits, slides, audio tapes, videotapes - for loan through the Centre's Media Library; resource material is now available for sale;
- (iii) production of audio-visual resource material based on curriculum changes and needs — often in the form of multi-media kits;
- (iv) access sessions, seminars, workshops and a mobile media in-service program to publicise the availability of the Centre's resources and services;
- (v) advice and assistance to individual Tasmanian schools in relation to resource management and organisation.

The Centre also operates two regional annexes in Launceston and Burnie which offer media resources and services to teachers.

Computer Education

The Education Department of Tasmania's Elizabeth Computer Centre is responsible for supporting the development of computing in Tasmanian schools. Over the years the Centre has expanded into a statewide computer network consisting of more than 225 computer terminals linked to seven computers in Hobart, Launceston, Devonport and Burnie. The network, called TASNET, provides links to all further education and secondary colleges, all high schools, including several district high schools, one primary school, as well as Education Department offices.

Computer terminals are linked to the computers via special-purpose telephone lines, rented on a yearly basis from Telecom. The recurrent expense of Telecom lines (calculated on the distance of the school from the nearest computer) previously has been a major barrier for country schools wishing to join the network.

However, recent advances in electronic technology now provide schools with a suitable solution to this problem without the high cost of line rentals. The microcomputer, a small, portable, stand-alone computer packaged inside a keyboard used for input of data, connected to an ordinary TV screen for output of data, and utilising small floppy disks for storage, now is commercially available at a reasonable cost. There are at least 100 microcomputers in schools, with the largest growth area being in the primary sector where schools are using the Computer Assisted Learning (CAL) programs developed by the Elizabeth Computer Centre.

High schools usually have purchased microprocessors in addition to their TASNET terminals. Several district high schools currently are using only microcomputers. However, it is possible for the microprocessor to be linked as a terminal through an acoustic coupler and the ordinary telephone network.

Museum Services

These services operate from the Tasmanian Museum and Art Gallery (Hobart) and the Queen Victoria Museum and Art Gallery (Launceston). Education Department officers provide support for school visits and develop activity material. Collections in many fields are also offered on loan to schools. A 'travelling service' is also available from both centres. In the South a 'Musbus' accompanied by an Education Officer brings displays to schools. A railway carriage provides a similar service to schools in the North and North-West.

Library Services

The Library Services Branch offers expert bibliographic and technical advice to schools. The Branch also provides the administration on standards and policies relating to development of efficient and educationally effective libraries.

A centralised cataloguing service (TASCIS) produces cards for newly acquired publications. This service is available to schools either by way of any computer terminal of the TASNET system or by order from the Branch.

Research

The Research Branch was established in 1961 and its activities centre around the use of information. In various capacities, Branch members are involved or assist in the collection of information, interpretation and dissemination of information, and development of strategies aimed at using information.

Research investigation and surveys include those aimed at assisting decision-making and policy formation. The Branch also monitors system initiatives such as levels of pupil achievement across the system and establishing data bases for future evaluation. In recent years some of the important research studies include:

- No. 69 — 1981 Survey of Basic Reading Skills of 10 Year Old Tasmanian Students;
- No. 72 — Permanent Part-Time Employment — A Preliminary Study;

- No. 73 — Work, Unemployment and Study in the Lives of Young Women from Country Areas;
- No. 74 — Education and Local Development in Australian Rural Areas;
- No. 75 — Why Does EPUY not Attract the Young Unemployed;
- No. 76 — A Case Study of the Work Experience Program at a Southern Tasmanian High School;
- No. 77 — Primary Science in Tasmania.

The Branch has also participated in a number of national or Commonwealth funded studies in the areas of Transition Education, Minor Impairments Affecting Children and Country Education. Policy support is provided through involvement in departmental or national reviews, and monitoring policy implementation. This includes collecting statistics related to Tasmanian and National planning needs as well as acting in a service capacity for major committees.

Other Branch activities include consultative services for groups and individuals conducting research as well as historical and documented information.

Physical Education

The Physical Education Branch provides advice and assists with both policy formation and implementation of physical education programs appropriate to the needs of pupils. This assistance includes conducting in-service programs for teachers as well as producing a wide range of curriculum guidelines and resource materials in the areas of dance, health, aquatics, gymnastics, games, athletics and outdoor education.

The Branch also evaluates facilities and equipment required to implement a comprehensive physical education program. This includes development of safety guidelines for the design and layout of playgrounds, swimming pools and achievement tracks.

In 1982, and previous years, the Branch was responsible for administering the State Learn-to-Swim Campaign, as well as school and community aquatic programs in the Education Department pools at Hobart, Launceston and Ulverstone.

Outdoor and Environmental Education

Education Department outdoor education and environment centres provide education, leisure, and recreation programs in a variety of environments. Children attend these centres on a daily or residential basis at the following places:

Hagley Farm Environment Centre is located 25km west of Launceston on the Bass Highway. Programs are based on a 62 hectare farm owned by the Education Department. The Centre caters for live-in or day visit groups from primary schools and offers three broad areas - natural science, social science and physical education.

Molesworth Day-Visit Environment Centre is located 36km north of Hobart in a hop growing region. It provides a base for field explorations through bushland, hopfields and farming areas. The daily programs are integrated into aspects of the curriculum such as mathematics, micro-studies, orienteering, land use, survival and language development.

Sprent School Farm and Environment Centre is located 20km south of Ulverstone and caters for live-in and day groups. Programs are based on a 12 hectare school farm and the surrounding environment.

Waddamana Field Studies Centre is located in the Central Highlands 140km from Hobart. The centre caters for live-in groups and offers educational, recreational and leisure programs based on the local flora, geology and power station.

Woodbridge Marine Studies Centre is located 40km south of Hobart and provides a base for practical marine studies for groups of primary and secondary pupils. Facilities include a laboratory, aquarium, research vessel and small craft. Activities cover a comprehensive range of topics including oceanography, marine biology, navigation and commercial fishing.

Division of Recreation

In response to the establishment of a Federal Department of Tourism and Recreation and the need for governments to play a more significant role in the provisions of leisure opportunities, the Tasmanian Government formed a Division of Recreation as a branch of the Education Department (1974-75). It was formed to assume prime responsibilities for recreation and compliment the work of existing state departments and agencies. The Division has the responsibility of promoting the physical and social well-being of all sections of the Tasmanian community through policies enhancing motivation, opportunity, support, co-ordination and co-operation (rather than direction and control) in all areas of leisure and recreation (people, planning, programs, facilities and land).

In 1982 most of the 36 full-time recreation officers were located at Divisional Headquarters (Hobart). However, there were also officers in Launceston, Burnie, Devonport and Ulverstone. The Regional recreation officers provide advice and support to local groups. The Division also has officers with statewide responsibilities for disadvantaged groups, camping, outdoor recreation, research and planning outdoor education and sports development. Facilities and equipment are also available for use by community recreation groups. They also ensure that leisure opportunities are planned to provide for equitable and rational distribution of resources which are in accord with community needs.

Co-operation with Government and non-Government agencies involved with recreation ensures that a variety of recreation and sporting facilities are available to cater for community, regional, State or national needs. This promotes a balance in emphasis between active organised group demands and informal recreation provision.

The Division also supports the development of recreation programs and assists with sports coaching schemes through the provision of information and advice on sources of finance for projects and assessing the merits of applications for programs or capital works grants.

The Division has recently completed two major projects that have facilitated better relations between Government Departments, the business community and the general public. The first project was the production of a detailed State land inventory of all designated and proposed recreation reserves into a manual. It will continue to foster greater levels of co-operation, co-ordination, rationalisation and participation between different Government Departments and Authorities.

The second project was the publication of "Wild About Tasmania and Your Guide to 150 Tasmanian Parks and Reserves", which is available for sale to the public. This was a totally Tasmanian product and has received strong support from Tasmanians and tourists alike.

TERTIARY EDUCATION

University of Tasmania

Founding

The University of Tasmania was founded in 1890 and was the fourth university to be established in Australia. When teaching began in 1893 with three lecturers and six students, it occupied 1.6 hectares of land on the Queen's Domain at Hobart.

Residential colleges

There are three residential colleges in the University. Christ College, affiliated with the University in 1933, was moved to new premises on the University campus at Sandy Bay in 1962 and provides accommodation in single study-bedrooms for 143 male and female students, eight tutors and a deputy warden. St John Fisher College, opened in 1962, accommodates 86 students in single study-bedrooms and is under the direction of the Catholic Church. Jane Franklin Hall was founded by the Tasmanian Council of Churches in 1950 as a hall of residence for women students. The Hall now provides accommodation for 160 male and female students.

Buildings

The University site at Sandy Bay was chosen in 1944. Until 1957 temporary huts were used extensively, mainly by the rapidly growing science departments. In 1957 the first permanent building was erected and by 1973 all departments of the then eight faculties were housed in permanent buildings.

Since that date the new buildings completed are: a computer centre; a child care centre; a cosmic ray observatory; a sports and recreation centre; and the University Centre which consists of a complex of lecture theatres (which can be combined to form a single 800-seat hall), a fine arts gallery and a classics museum. A major extension to the Arts-Commerce-Education building has been completed as well as a further extension to the Union building. A drama studio was completed during 1981. Hytten Hall, a former student residence was converted to house the Centre for Education.

Finance

From 1974 the Federal Government assumed full responsibility for tertiary education. Tuition fees were abolished as from 1974 and an assistance scheme was introduced to assist full-time students, subject to a means test.

The following table shows the income and expenditure of the University of Tasmania for recent years:

University of Tasmania: Income and Expenditure
(S'000)

<i>Particulars</i>	<i>1978</i>	<i>1979</i>	<i>1980</i>	<i>1981</i>
<i>Income</i>				
Recurrent purposes—				
Federal Government	17 377	19 241	20 991	27 341
Other	841	324	303	505
Total	18 218	19 565	21 294	27 846
Equipment grants—				
Federal Government	522	571	635	724
Other	3	1	1	—
Total	525	572	636	724
Other purposes—				
Halls of residence	233	256	243	—
Prizes, scholarships and				
benefactions	214	215	283	1 051
Research grants	608	999	991	1 163
Other	37	1 451	1 013	2 177
Total	1 092	2 921	2 530	4 391
Total income	19 835	23 058	24 460	32 961
<i>Expenditure</i>				
Recurrent purposes—				
Academic activities (incl.				
research)	12 097	12 947	13 944	18 353
Academic services	2 055	2 270	2 421	3 038
Student and staff services	313	320	390	476
General university services	3 769	3 906	4 547	5 787
Other	16	251	261	326
Total	18 250	19 694	21 563	27 980
Equipment grants—				
Academic activities (incl.				
research)	249	284	321	384
Academic services	229	272	292	366
General university services	38	17	37	73
Total	516	573	650	823

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University of Tasmania: Income and Expenditure
(\$'000)—*continued*

<i>Particulars</i>	<i>1978</i>	<i>1979</i>	<i>1980</i>	<i>1981</i>
<i>Expenditure</i>				
Other purposes—				
Halls of residence	248	266	273	—
Prizes, scholarships and benefactions	85	205	198	358
Research grants	623	858	985	1 146
Other	2	1 022	1 012	2 839
Total	958	2 351	2 468	4 343
Total expenditure	19 724	22 618	24 681	33 146

Government of the University

The governing body of the University is the Council, comprising the Chancellor, the Vice-Chancellor and 19 members, 17 of whom are elected or appointed and two, the Director-General of Education and the Deputy Chairman of the Professorial Board, are *ex officio*.

The Vice-Chancellor is the chief academic and executive officer. He presides over the Professorial Board which is the governing body on academic matters.

The following table shows the number of teaching staff and students:

University of Tasmania: Academic Staff and Students Enrolled at 30 April (a)						
<i>Particulars</i>	<i>1977</i>	<i>1978</i>	<i>1979</i>	<i>1980</i>	<i>1981</i>	<i>1982</i>
Academic staff—						
Professors	38	38	38	37	39	36
Other	260	r 270.5	263	263.8	334.35	335.9
Total academic staff	298	r 308.5	301	300.8	373.35	371.9
Individual students enrolled	3 525	3 517	3 435	3 517	5 082	5 210

(a) Full-time equivalent

Staff and Students

The next table shows student enrolment by course:

University of Tasmania: Enrolments 1982				
<i>Course</i>	<i>Students enrolled</i>			
	<i>New enrolments 1982 (a)</i>	<i>Total enrolments at 30 April</i>		
		<i>Males</i>	<i>Females</i>	<i>Total</i>
Master and Doctor degrees	232	428	222	650
Bachelor degree—				
Agricultural Science	22	32	18	50
Fine Art	84	89	98	187
Arts	337	363	510	873
Commerce	132	236	76	312
Economics	78	109	31	140
Education	239	165	477	642
Special Education	8	2	8	10
Engineering	79	204	10	214
Surveying	8	34	1	35
Law (b)	72	113	51	164

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University of Tasmania: Enrolments 1982—continued

Course	New enrolments 1982 (a)	Students enrolled		
		Total enrolments at 30 April		
		Males	Females	Total
Medicine (c)	57	179	111	290
Music	42	38	55	93
Pharmacy	11	18	29	47
Science	227	434	162	596
Combined B.A./LL.B.	39	70	23	93
Combined B. Ec/LL.B.	7	9	3	12
Combined B.Com./LL.B.	5	10	2	12
Combined B.Sc/LL.B.	1	3	1	4
Total	1 448	2 108	1 666	3 774
Non-degree courses—				
Sub-graduate and post-graduate diploma	287	134	246	380
Other (d)	271	203	203	406
Total	558	337	449	786
Total all courses	2 238	2 873	2 337	5 210

(a) New enrolments refer to those students who either commenced studies for higher degrees or, being undergraduates, enrolled at the University of Tasmania for the first time in 1982, or transferred from one faculty to another.

(b) From 1975, students must complete one year in another faculty before starting law.

(c) Students may enrol for an honours degree in Medical Science after completing at least three years of M.B., B.S. course.

(d) Of students classified as 'other' 28 students were enrolled for a master degree qualifying examination. The remainder were enrolled for university subjects but were not proceeding to either a degree or diploma.

Degrees Conferred

The following table shows degrees conferred:

University of Tasmania: Degrees Conferred (a) During Year Ended 30 June						
Degree	1977	1978	1979	1980	1981	1982
<i>Higher Degrees</i>						
Higher Doctor	Males —	2	1	1	—	—
	Females —	—	—	—	—	—
Doctor of Philosophy	Males 7	14	14	20	20	18
	Females 1	4	2	1	3	4
Master	Males 14	10	21	6	14	16
	Females 3	5	5	1	5	4
<i>Bachelor Degrees (b)</i>				1981	1982	
Agricultural Science	Males			10	3	
	Females			8	3	
Fine Art	Males			—	7	
	Females			—	11	
Arts (c)	Males			90	70	
	Females			114	104	
Commerce (c)	Males			27	31	
	Females			5	8	
Economics (c)	Males			25	18	
	Females			3	4	
Education	Males			10	32	
	Females			20	95	

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University of Tasmania: Degrees Conferred (a) During Year Ended 30 June—continued

<i>Bachelor Degrees (b)</i>		1981	1982
Special Education	Males	—	1
	Females	3	1
Engineering	Males	22	22
	Females	—	—
Law	Males	20	27
	Females	8	7
Medical Science	Males	29	36
	Females	10	15
Medicine/Surgery	Males	29	27
	Females	7	10
Music	Males	—	7
	Females	—	7
Pharmacy	Males	7	16
	Females	5	7
Science	Males	107	96
	Females	49	40
Surveying	Males	14	3
	Females	—	—
Total bachelor degrees	Males	390	397
	Females	232	312
	Persons	622	709

(a) Excludes honorary degrees.

(b) Includes bachelor degrees with honours.

(c) Includes combined Law degrees

Advanced Education in Tasmania

Concept

Until the late 1960s higher education in Australia had been provided by universities. Some professional courses were also provided by other institutions. In Tasmania technical colleges, in addition to playing their main role in providing apprentice training, trade courses and adult education etc, also provided courses of a professional nature. The development of colleges of advanced education allowed both a re-organisation and a rationalisation of tertiary education in Australia.

In general terms, colleges of advanced education provide higher education and training with a vocational and applied emphasis. Degree and diploma courses have been developed in a wide range of discipline areas to meet identified community demands.

History

Following a national seminar on planning for colleges of advanced education held in Hobart towards the end of 1967, the educational specifications and a master plan for the Mt Nelson Campus were prepared. In June 1969 the contract for the Resource Materials Centre (Stage 1) of the project was let. Appointment of staff to the College commenced in 1971 and during 1972 the first on-site lectures were held at Mt Nelson. In 1973 a campus of the College was established at Newnham (a suburb of Launceston).

The College has recently undergone significant changes as a result of the rationalisation of tertiary education in Tasmania. This rationalisation began with the Committee on Post-Secondary Education appointed jointly by the Federal and State Governments in April 1975 which recommended major changes in the structure of the College. The proposals included widening the range of courses at the University in Hobart and establishing the Newnham campus of the College as the centre of advanced education

in the North of the State. In February 1980 the Tasmanian Government accepted the recommendations of the Tertiary Education Commission of Tasmania on the future training of teachers in Southern Tasmania. As a result the Schools of Teacher Education, Art, Music and Librarianship were transferred to the University from 1 January 1981.

This rationalisation, which resulted in the closure of the Mt Nelson campus, is in keeping with the Tasmanian Government's policy to achieve a balanced development of the three sectors of tertiary education on a geographic basis.

Advanced Education Council

The *Advanced Education Act* 1968 established the Tasmanian Council of Advanced Education. An amendment to this Act now provides for the appointment of 17 members of whom one shall be the person holding the office of the Principal; two shall be officers of the Advanced Education Service (other than the Principal); and two shall be persons undertaking a course of advanced education.

The College Today

The Tasmanian College of Advanced Education is now a multi-disciplinary tertiary college centred in the Launceston suburb of Newnham. The College has also developed a program of external studies to assist students State-wide who cannot attend classes in Launceston on a full-time basis.

The College is comprised of six academic divisions: Administrative Studies consisting of the Schools of Business Studies and Legal Practice; Arts and Sciences consisting of the Schools of Applied Science and General Studies; Community Studies consisting of the Schools of Nursing and Social Work; Education formed by the School of Teacher Education; Environmental Design and Engineering consisting of the Schools of Environmental Design and Engineering; and Visual and Performing Arts consisting of the Schools of Art, Music and Drama. The Schools are supported by the following services: the Library and Audio Visual Services Unit, the Computer Centre, Counselling Unit and External Studies Unit.

Students and Courses

The next table shows total enrolments for a three-year period:

College of Advanced Education: Enrolments, Tasmania
(Number)

Description	1979			1980			1981		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
Full-time	716	1 177	1 893	653	1 153	1 806	374	583	957
Part-time	581	353	934	677	443	1 120	661	464	1 125
Total	1 297	1 530	2 827	1 330	1 596	2 926	1 035	1 047	2 082

Awards are made at four levels; bachelor degree, diploma, graduate diploma and master's degree. The following table shows the number of students enrolled by course in 1981:

College of Advanced Education: Enrolments by Course, Tasmania, 1981
(Number)

Course	Full-time		Part-time		Total	
	Males	Females	Males	Females	Males	Females
Master of Education	1	—	19	11	20	11
Legal Practice Course	17	6	—	—	17	6
Grad. Dip. in Special Education ..	—	—	1	13	1	13
Grad. Dip. in Architecture	—	—	20	3	20	3
Grad. Dip. in Landscape Planning	—	—	6	3	6	3

College of Advanced Education: Enrolments by Course, Tasmania, 1981
(Number)—continued

Course	Full-time		Part-time		Total	
	Males	Females	Males	Females	Males	Females
Grad. Dip. in Urban Planning	—	—	15	2	15	2
Grad. Dip. in Buildings Operations	—	—	1	—	1	—
Grad. Dip. in Arts & Craft	1	1	—	—	1	1
Bachelor of Business (Business Admin.)	1	2	51	14	52	16
Bachelor of Business (Accounting)	36	22	168	46	204	68
Bachelor of Business (Public Administration)	—	1	22	4	22	5
Bachelor of Business (Accounting & Data Processing)	19	4	14	2	33	6
Bachelor of Business (Data Processing)	1	—	5	1	6	1
Bachelor of Applied Science (Applied Chemistry)	4	—	18	4	22	4
Bachelor of Applied Science (Medical Technology)	22	16	11	7	33	23
Engineering Feeder Course	11	—	—	—	11	—
Bachelor of Education	175	433	2	10	177	443
Bachelor of Education — In Service	—	—	94	163	94	163
Bachelor of Arts in Social Work	21	63	12	13	33	76
Bachelor of Arts in Environmental Design	38	6	7	1	45	7
Diploma of Valuation — RMIT (a)	3	—	—	—	3	—
Diploma of Personnel Management & Industrial Relations	—	1	44	10	44	11
Diploma of Business — Small Business Management	—	—	11	5	11	5
Diploma of Applied Science	—	—	12	6	12	6
Diploma of Arts in Art & Craft	14	14	—	3	14	17
Diploma of Arts in General Studies	4	6	79	113	83	119
Associate Diploma in Credit Management	—	—	1	—	1	—
Associate Diploma in Ag. Business Management	—	—	42	9	42	9
Associate Diploma in Art & Craft	5	3	6	20	11	23
Associate Diploma in Music	1	5	—	1	1	6
Total Enrolments	374	583	661	464	1 035	1 047

(a) A two year course, the second year of which must be completed through the Royal Melbourne Institute of Technology.

Teaching Staff

The next table shows teaching staff by full-time or part-time status:

College of Advanced Education: Teaching Staff (a) Tasmania						
Description	1976	1977	1978	1979	1980	1981
Full-time	205	201	210	204	196	123
Part-time	17	18	38	31	16	9
Total	222	219	248	235	212	132

(a) Teaching effort expressed as full-time equivalent units.

Finance

At the June 1973 Premiers' Conference the States accepted the Federal Government's offer to assume full financial responsibility for tertiary education from 1 January 1974. (The amounts of recurrent expenditure saved by the States were deducted from their

financial assistance grants.) The Federal Government also announced in its 1973-74 Budget the decision to abolish tuition fees.

Prior to 1972-73 Federal Government grants for colleges of advanced education and for teachers' colleges were provided under separate programs, but since then they have both been absorbed into a wider program of grants for advanced education.

FEDERAL GOVERNMENT ACTIVITIES IN EDUCATION

Introduction

Under the federal system of government in Australia, the six States and the Northern Territory are responsible for providing education services for their own residents. The Australian Government is responsible for education in the Australian Capital Territory and a few small external territories.

In recent years the Federal Government has provided the state governments with substantial financial assistance specifically for schools, universities, colleges of advanced education and colleges of technical and further education. In addition, the Federal Government has administered Australia-wide schemes of financial assistance for students for many years.

The Federal Government first became directly involved in education when it established an Office of Education in 1945 and a branch was opened in Hobart. However, education remained a state responsibility—the principal functions of the Federal Government's Hobart office were migrant education and administration of Federal Government university scholarships. In 1951 the Hobart office was closed and its functions were transferred to the Tasmanian Department of Education which acted as an agent for the Federal Government. With increased financial involvement in education the Hobart Office was re-opened in 1964. However, education was still primarily a state responsibility.

The portfolio of the Federal Minister for Education is composed of the Department of Education, the Commonwealth Tertiary Education Commission (assisted by the Universities Council, the Advanced Education Council and the Technical and Further Education Council), the Commonwealth Schools Commission, and the Australian Capital Territory Schools Authority. The Office of Child Care, which advises the Government on support for child care and pre-school education programs, is located within the Department of Social Security.

The Australian Constitution empowers the Commonwealth Government to make special-purpose grants to the States and to place conditions upon such grants. This power has been used to provide financial assistance to the States specifically for educational purposes. There are two national education commissions which advise the Commonwealth Government on the needs of educational institutions throughout Australia for the purposes of financial assistance: the Commonwealth Schools Commission, which was established in 1973, and the Commonwealth Tertiary Education Commission, which was established in 1977 to replace three former commissions—the Universities Commission; the Commission on Advanced Education and the Technical and Further Education Commission.

Generally, the Commissions are required to consult with State authorities (and, in the case of the Commonwealth Schools Commission, with the authorities conducting non-government schools) and such other persons, bodies and authorities as they think necessary before making recommendations to the Commonwealth Government on the amount of financial assistance required, both in general and for specific purposes, to meet the needs of each sector.

Department of Education

The Department provides advice to the Federal Minister for Education on general educational policy measures and the development and investigation of educational policy proposals in new areas. It is involved in the planning and evaluation of the effective use



Sir John Falls on the Franklin River

(Tasmanian Government Stills Photographic Section)

Autumn at Lake Elysia at the Labrinth, Du Cane Range

Edward Gall



*Rock outcrop on
Maria Island*



*(Tasmanian Government
Stills Photographic Section)*

Coles Bay, East Coast



of resources in Australian education and co-ordinates programs of advisory commissions and committees.

The Department is responsible for international relations in education; for example for co-ordinating Australian participation in the educational activities of UNESCO and OECD. It administers schemes of assistance for Australian students and also exchange programs which enable Australians to study overseas and overseas students and educationists to visit Australia. The Department is also responsible for the production of language teaching materials, provides advice on Aboriginal education and provides administrative assistance for a number of advisory committees, including the Australian Council on Awards in Advanced Education.

The Department also provides the secretariat for the Commonwealth Institutions Accreditation Committee for Advanced Education. This Committee co-operates with the Australian Council on Awards in Advanced Education and course accrediting authorities in the States and the Northern Territory to promote consistency in academic awards in colleges of advanced education throughout Australia.

Federal Government Assistance for Tertiary and Secondary Students

The next table shows the number of students in Tasmania who received Federal Government assistance under the various schemes for recent years:

Number of Students in Tasmania Receiving Federal Government Assistance at 30 June							
<i>Scheme</i>	1975	1976	1977	1978	1979	1980	1981
Tertiary education assistance ..	1 668	1 770	1 773	1 797	1 455	1 542	1 569
University	—	—	—	—	—	—	—
Advanced Education	—	—	—	—	—	—	—
Technical	12	2	—	—	—	—	—
Secondary	—	—	—	—	—	—	—
Adult secondary	37	39	64	56	57	45	36
Senior secondary	670	2	—	—	—	—	—
Secondary allowances	200	260	298	377	366	402	421
Post-graduate	54	54	51	44	44	40	54
Aboriginal secondary	313	316	300	300	292	306	381
Aboriginal study	11	15	12	22	30	49	42
Isolated children	806	731	688	625	568	469	470
Other	23	9	—	—	—	—	—
Total	3 794	3 198	3 186	3 221	2 812	2 853	2 973

Brief descriptions of the various schemes are given below:

Tertiary Education Assistance Scheme: This scheme provides means-tested (non-competitive) allowances to full-time, unbonded students attending approved courses at tertiary institutions. Benefits in 1983 include an allowance, subject to a means test, of up to \$2 010 per year for students living at home; and up to \$3 100 per year for students living away from home and for independent students. Dependants' allowances of \$42.70 per week for a dependent spouse and \$10.00 per week for each dependent child are payable. Also provided are allowances to assist with student union and other incidental fees. The following incidentals allowances are payable in 1983: for students enrolled at universities, \$100; for students at colleges of advanced education, \$70; and for students at technical colleges, \$30.

Adult Secondary Education Assistance Scheme: Assistance is available under this scheme for students, aged 19 years or more on January 1 of the year of study, who have had a break from secondary studies and who have returned to undertake full-time or one year matriculation level program or a two year program (if studies beyond Year 10 in the Australian secondary school system have not previously been undertaken) full-time at secondary schools, technical colleges and other approved institutions. In 1983 the maximum allowance for students living at home is \$1 860 per year and up to \$2 867 per year for students living away from home and for independent students.

Secondary Allowances Scheme: Families with limited financial resources are assisted under this scheme to maintain their children at school for the final two years of secondary education. For 1982 an allowance of up to \$726 per year was provided on a non-competitive basis subject to family income.

Post-graduate Awards: Awards are made annually to enable students to undertake post-graduate studies at an Australian university or college of advanced education. In Tasmania, in 1982, 37 new awards were made available. Selection is made on the basis of ranking by each institution and in the case of course awards and advanced education institutions awards, the final order of merit list is drawn up by a Central Selection Committee. The award, subject to annual renewal, may be held for a maximum of four years in the case of a doctorate degree candidate or two years in the case of a master's candidate. In 1983 award holders receive a living allowance of \$6 850 per year. Provision is also made for assistance with travel, establishment and thesis costs and married award holders may qualify for an allowance in respect of dependants (spouse and children). Allowances are taxable. In 1983 post-graduate students are able to earn \$1 000 from an award provided by a tertiary institution or \$5 000 from a private sector award.

Aboriginal Grants Schemes: The Department of Education administers two schemes of assistance for students of Aboriginal descent—the Aboriginal Study Grants Scheme and the Aboriginal Secondary Grants Scheme. Aboriginal study grants assist Aboriginals and Torres Strait Islanders to undertake training and study after leaving school and provide the full-time student with fees and a living allowance. In 1983 married students or students 18 and over receive \$76 per week, while unmarried students under 18 receive \$64 per week. Other special allowances such as establishment and textbook allowances, are also payable, including some benefits to part-time students. The Aboriginal Secondary Grants Scheme provides assistance to Aboriginal or Torres Strait Islander secondary school students to encourage them to obtain a secondary education. The scheme provides a living allowance which, in 1983, is \$376 per year for students in junior grades and \$537 for senior students. Allowances are also payable for the cost of board (in approved cases) schoolbooks and clothing, uniforms, fares, fees and other items.

Assistance for Isolated Children: This scheme provides financial assistance to enable children living in isolated areas to have access to schooling in the appropriate grade or year. In 1983, boarding allowances are payable of up to \$1 932 a year for a primary pupil, up to \$2 403 a year for a senior secondary student and up to \$2 132 a year for other secondary students including a basic \$866 free of means test. Where a family, in preference to boarding its children away from home, maintained a second home to enable the children to attend school on a daily basis, a second home allowance of between \$866 and \$2 209 per year is paid, depending on the number of children involved. For children who studied by correspondence, an allowance of up to \$500 per child per year is payable.

National Aboriginal Education Committee: This Committee was established in March 1977 to advise the Commonwealth Minister for Education and his Department on the educational needs of Aboriginal people and the most appropriate ways of meeting these needs. The National Aboriginal Education Committee is an all-Aboriginal committee of nineteen members who come from all states, including Tasmania as well as the Torres Strait Islands.

The Transition from Secondary Education to Employment

On 22 November 1979, the Commonwealth Ministers for Education and for Employment and Youth Affairs announced that the Commonwealth would provide additional grants to the States to a total of \$150 million over five years for a special Transition from School to Work Program.

In 1980 Tasmania received \$798 000 and \$828 000 in 1981. In 1982 \$900,000 was provided under this program. These funds are provided for the development of programs, in both government and non-government schools and in TAFE colleges, for the extension and diversification of education and training. The program is concerned primarily with improving the employment prospects of young people through appropriate education and training courses.

Adult Migrant Education Program

The Department of Immigration and Ethnic Affairs, in association with the Adult Migrant Education Service of the Tasmanian Division of Further Education, offers statewide opportunities for free English language training. Education services commenced in 1947 and since 1951 the program has been funded by the Federal Government and administered by the State authorities.

The education program offers learning opportunities as part of on-arrival provision for newly-arrived migrants and refugees. A variety of on-going programs are offered for those who have been in Australia for longer than six months.

On-arrival courses cover the Australian way of life, including institutional arrangements, community services, cultural aspects and information to assist orientation and settlement. Activities include individual 'self access' arrangements, full and part-time day and evening classes and special courses which are directed to work related language needs such as those of professionally qualified people. Volunteer tutors visit homes under the Home Tutor Scheme and use is made of television and correspondence lessons. Persons enrolled in full-time On-Arrival Courses (ranging from 6 to 10 weeks) are eligible for a living allowance equivalent to the unemployment benefit. Similarly, persons enrolled in part-time On-Arrival Courses are also eligible for a living allowance equivalent to unemployment benefit, but, unlike the full-time On-Arrival Courses, such part-time courses are subject to an income test.

The level of the courses, length of time over which a course is offered and the appropriate education arrangements depend on language learning needs of the client group, their personal circumstances and educational background. The Education Section of each Regional Office of the Department of Immigration and Ethnic Affairs is responsible for making arrangements with State Adult Migrant Education authorities to provide the best possible learning opportunities for people in various locations.

During the 1980-81 financial year 84 students were enrolled in full-time English courses in Hobart, Launceston and Burnie; 307 in part-time day and evening courses, 62 in full-time/part-time courses, and 29 in correspondence courses. The Home Tutor Scheme using 96 volunteer tutors teaching English on a one-to-one basis, usually in the migrants' homes, attracted 119 students throughout the year.

Office of Child Care

The Commonwealth Government, through the medium of the Children's Services Program, provides grants to State and Local Governments and community organisations for the development of services which will enhance the care and development of children and which will support their families.

In Australia the basic responsibility for the regulation, licensing and provision of family and child welfare and early childhood education services lies with the States.

The Commonwealth's intention is to encourage the development of a flexible network of innovative projects in the children's and family service area which complement the activities of State Governments and which are directed at groups in the community most in need, including migrant, socially and economically deprived, isolated, aboriginal and handicapped children.

Types of services funded are day care centres, family day care schemes, play group associations, after school and vacation care, occasional and emergency care, youth support and family support. The latter two are administered jointly with the State Government.

The Commonwealth Schools Commission

The Schools Commission was created by the Federal Government as a statutory body under the *Schools Commission Act* 1973. The Commission was preceded by the Interim Committee for the Australian Schools Commission, chaired by Professor Peter Karmel. The Interim Committee reported to the Federal Government in May 1973 in a Report

entitled *Schools in Australia*, the major recommendations of which were accepted by the Government. As a result of this Report, funding for Australian schools for 1974 and 1975 was made available by the Federal Parliament which enacted the *States Grants (Schools) Act 1973*. Other Federal Government funds continued to be available under the *States Grants (Schools) Act 1972*. Supplementary grants were made in subsequent amendments to both Acts. Since 1976 yearly allocations have been made under the various *State Grants (Schools Assistance) Act*.

In broad terms, the functions of the Commission are:

- (i) To report to the Federal Minister of Education, after consultation with interested parties, on the needs of primary and secondary schools and on the priorities that should be given to satisfying those needs;
- (ii) To inquire into and report on important aspects of primary and secondary schooling, with a view to improving the quality of education and the efficient use of resources;
- (iii) To carry out, in conjunction with various schools and school systems, studies aimed at finding solutions to educational problems.

State Planning and Finance Committee

The functions of the State Planning and Finance Committee are to:

- (i) Supervise the distribution to non-government schools of Federal Government grants within the State and in particular to recommend subsidy levels for non-systemic schools and report regularly to the Commonwealth Schools Commission on the application of the needs principle in the distribution of block subsidy grants for Catholic systemic schools;
- (ii) Establish priorities based on need and approve applications for building grants from non-governmental schools;
- (iii) Make recommendations on non-government schools seeking to be declared as disadvantaged for the purposes of the Disadvantaged Schools Program;
- (iv) Advise the Commission on matters affecting the financing and development of non-government schools, and on other matters as referred by the Commission from time to time.

Members are appointed by the Federal Minister for Education with the aim of achieving broadly representative committees competent to make decisions on priorities and levels of funding in individual schools.

Financial Allocation

The following table shows the program allocations for 1982:

Commonwealth Schools Commission Programs (a)
(\$'000)

Program	Tasmania	All States
Government schools—		
General recurrent	8 571	269 174
English as a second language (including new arrivals)	486	42 848
Disadvantaged schools	571	25 348
Special education (including integration)	610	17 768
Capital grants	3 910	124 749
Total	14 148	479 887
Non-government schools—		
General recurrent	9 153	418 572
Emergency assistance	—	796
English as a second language (including new arrivals)	121	16 074
Disadvantaged schools	71	4 251

continued next page

Commonwealth Schools Commission Programs (a)
(S'000)—continued

<i>Program</i>	<i>Tasmania</i>	<i>All States</i>
Special education (including integration)	39	4 752
Capital grants	1 262	44 856
Total	10 646	489 301
Joint programs—		
Multicultural education		
General support	110	4 109
Ethnic schools	—	3 000
Country areas	391	8 451
Special education—		
Children in institutions	56	1 892
Severely handicapped	75	2 472
Professional development—		
Professional development and replacement	440	15 562
Education centres	—	1 977
Special projects—		
Projects of national significance	—	1 403
Total	1 072	38 866
Total all programs	25 866	1 008,054

(a) Amounts for 1982 are on an outturn basis.

Programs for 1982

The Commission operated ten main programs during the year. The programs and Tasmania's share of the funds are summarised below:

General Recurrent Grants Program: In 1982 \$687.7 million was allocated nationally to cover staffing and other running costs including teaching materials and property maintenance. In Tasmania, government schools were allocated \$8.57 million and non-government schools an estimated \$9.1 million based on existing funding levels.

The levels of assistance to which a non-government school may be entitled are shown in the following table. (In the case of Catholic and Seventh-Day Adventist Systemic schools a block subsidy grant at one of these levels is given to cover all schools in the system). In 1982 the six funding levels that applied previously were compressed into three funding groups in the following manner. Basically, levels 1-3 became Group 1, levels 4-5 became Group 2 and level 6 became Group 3.

1982 Per Capita Subsidies Payable to Non-Government Schools and Percentages of Average Government School Standard Costs (a)

<i>Group</i>	<i>Primary</i>	<i>Secondary</i>	<i>Percentage of Average Government School Standard Costs</i>
	<i>\$</i>	<i>\$</i>	<i>%</i>
1	296	480	20
2	444	721	30
3	562	913	38 (b)

(a) Amounts for 1982 are on an outturn basis.

(b) In 1983, these grants will increase to 40% of average government school standard costs.

As recommended by the Commission, the Government has decided that new non-systemic schools will now receive supplementary establishment grants for the first four years of their operation to assist with the special costs which accompany the development of a new school. These establishment grants, which will be calculated on a per student

basis, will be 10 per cent, 7.5 per cent, 5 per cent and 2.5 per cent of average government school standard costs respectively for each of the first four years of a non-systemic school's existence. The table shows the per student value of these grants in 1982.

Established Grants Per Student for New Non-Government Non-Systemic Schools 1982

Year of Operation	Percentage of government standard cost	Grant per primary student	Grant per secondary student
	%	\$	\$
1st Year	10	148	240
2nd Year	7.5	111	180
3rd Year	5	74	120
4th Year	2.5	37	60

English as a Second Language Program: This program replaces the Migrant Education Program and has two distinct elements; the bulk of the funds is allocated to develop and improve competence in English of students who come from non English-speaking backgrounds. The remainder of the funds is earmarked for the provision of intensive English language programs for non English-speaking students who are newly arrived in Australia. In 1982, \$49.92 million was allocated nationally for the first element and \$9.0 million was allocated for the second element. The allocation for Tasmania was \$607 000, with \$486 000 going to government schools and \$121 000 to non-government schools for use under both elements.

Disadvantaged Schools Program: In 1982, \$29.6 million was allocated nationally to provide a positive discrimination in favour of those schools declared to be disadvantaged, on the basis of socio-economic background characteristics associated with lower than average school success. The allocation for Tasmania was \$642 000, with \$571 000 going to government schools and \$71 000 to non-government schools.

Special Education Program: In 1982, \$22.5 million was allocated nationally to improve the quality and coverage of educational services for handicapped children by supplementing the funding of special education of those children attending special or regular schools or by assisting the integration of handicapped children into regular schools. The allocation for Tasmania was \$649 000, with \$610 000 going to government schools and \$39 000 to non-government schools for use in both areas.

Capital Grants Program: In 1982, \$169.6 million was allocated nationally for building and equipment projects, including refurbishing, upgrading and leasing of facilities. The allocation for Tasmania was \$5.17 million, with \$3.9 million going to government schools and \$1.26 million to non-government schools.

Multicultural Education Program: In 1982, \$4.1 million was allocated nationally to support, in particular three major areas of activity: general multicultural education projects including community language teaching programs, small grants projects to school communities and ethnic schools liaison officers. The allocation for Tasmania was \$110 000 to be used jointly in both government and non-government schools.

Ethnic Schools Program: This program was introduced in 1981 for an interim two year period to provide assistance to ethnic education authorities conducting part-time courses in community languages. In 1982, \$3.0 million was allocated nationally for eligible schools or insertion classes in regular schools in all States.

Country Areas Program: This program replaced the Disadvantaged Country Areas element of the Disadvantaged Schools Program which ceased to operate in 1981. It has three main aims: to alleviate educational disadvantage of country children and their families, to discover better ways of delivering educational services to students in country schools and to provide a framework within which school communities and country people can work co-operatively to improve education opportunities for country children. In 1982, \$8.45 million was allocated nationally for declared country areas. The allocation for Tasmania was \$391 000 for joint use in both government and non-government schools.

Children in Residential Institutions Program: This program was previously an element of the Special Education Program. In 1982, \$1.9 million was allocated nationally to provide supplementary educational support to residential institutions and opportunities for broadening the general experience of the children in the outside community. The allocation for Tasmania was \$56 000 to be used in eligible institutions.

Severely Handicapped Childrens Program: This new program has been introduced to provide educational programs for children with severe developmental disabilities and for whom educational services are either not available or are very limited. In 1982, \$2.47 million was allocated nationally to support the development and implementation of planned educational programs including identification of children at home and training of personnel; and the assessment of the application of learning and teaching aids. The allocation for Tasmania was \$75 000 to be administered by a joint committee representing government and non-government sectors, agencies and interested organisations.

Professional Development Program: This program replaced the Services and Development Program which has been renamed. In 1982, \$15.56 million was allocated nationally to support professional development programs for teachers and support staff and activities for parents and other community members, designed to assist them in school-based decision making and school improvement efforts. The allocation for Tasmania was \$440 000 for teacher development and associated activities. An additional \$1.97 million was allocated nationally for education centres which complement the thrust of the Professional Development Program.

Special Projects Program: In 1982, \$1.4 million was allocated nationally to support individual projects of national education significance identified by the Commission, which are directed at areas of special need generally not catered for by other special purpose programs. The allocations for the various elements of the program were; \$300 000 for Choice and Diversity within Government School Systems, \$100 000 for Education of Girls, \$100 000 for Gifted and Talented Children, \$150 000 for the Schools Travel and Exchange Scheme, \$150 000 for School Evaluation, \$100 000 for School and Community and \$503 000 for General Projects.

Commonwealth Tertiary Education Commission

In April 1977, the Commonwealth Parliament passed legislation to establish a Tertiary Education Commission. The Commission, which commenced operation on 22 June 1977, replaced the three existing tertiary commissions — the Universities Commission, the Commission on Advanced Education, and the Technical and Further Education Commission.

The role of the Commonwealth Tertiary Education Commission is to develop and recommend policies for Commonwealth financial support to the States across the range of post-secondary institutions. Under its Act, the Commission is required to perform its functions with the object of promoting the balanced and co-ordinated development of the provision of tertiary education in Australia and the diversification of opportunities for tertiary education. The Commission is assisted in its work by three statutory Councils concerned with universities, advanced education, and technical and further education.

Financing of Tertiary Education

Commonwealth Government assistance to the States for universities dated from 1951-52. Grants for colleges of advanced education were made from the beginning of the 1967-69 triennium. Broadly speaking, these grants were provided on a matching basis (joint Commonwealth and State expenditure). The Commonwealth Government first became involved in the provision of grants for technical and further education in 1964 when a scheme of unmatched capital grants to the States was introduced.

Since 1974 the Commonwealth has, with the agreement of the States, accepted full responsibility for financial assistance to universities and colleges of advanced education. Following the establishment of the Commonwealth Tertiary Education Commission, grants for these two sectors were provided under the *States Grants (Tertiary Education*

Assistance) Act 1977 for the year 1978, and for the triennia 1979-81 and 1982-84 under the *States Grants (Tertiary Education Assistance) Acts 1978 and 1981*. Generally, recurrent grants are appropriated on a triennial basis while capital and equipment grants are appropriated on an annual basis.

All Commonwealth grants for TAFE are appropriated on an annual basis and are also included in the *States Grants (Tertiary Education Assistance) Acts*.

The following table sets out Federal Government payments to Tasmania for university education, advanced education and technical and further education for recent years:

Federal Government Payments to Tasmania for Tertiary Education (\$'000)						
Sector	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
University—						
Recurrent (a)	16 427	18 057	18 864	20 832	25 426	31 229
Capital	573	456	790	313	357	519
Advanced Education—						
Recurrent	8 678	9 256	9 436	10 068	8 739	8 323
Capital (b)	404	1 598	3 221	810	952	377
Recurrent	969	1 110	1 673	2 005	2 282	2 600
Capital (b)	1 664	1 970	394	3 400	4 772	3 483

(a) As from 1 July 1976, equipment grants for universities have been included in recurrent grants.

(b) Includes grants for equipment.

STATE LIBRARY OF TASMANIA

General

The State Library of Tasmania was created in 1943 under the *Libraries Act 1943* from the former Tasmanian Public Library which was formed in 1849. The purpose of the State Library is to provide a comprehensive library and information service to all sections of the Tasmanian community.

Information Services

A primary role of the State Library is the collection and dissemination of information. From its original role as a repository of knowledge the public library has assumed the wider responsibility of collecting and making readily available a wide range of information from any sources. During the 1970s rapid developments in information retrieval using computer and communications technology applications have dramatically increased the library's ability to store and access information in response to the growing public need and demand.

As a major source of information in Tasmania the State Library was one of the first public libraries in Australia to provide on-line information access as a normal part of its reference services. In 1977 the State Library installed its first visual display unit as part of the inauguration of the AUSINET computer-based Australian information network. In 1979 a second terminal allowed on-line searching of the large array of North American data bases available on Lockheed Aircraft Corporation's DIALOG system and System Development Corporation's ORBIT.

These tools have enabled the Library to significantly improve its capacity to provide information services in science and technology. Most of the use made of DIALOG has been for government departments and agencies, and for people in business and industry who are involved in establishing new enterprises or in extending and improving existing ones.

Within Tasmania the State Library has inaugurated a computer based community information index (TICO) and co-operates widely with other community, business and government organisations. The Library's information service extends to all parts of the State through the regional framework outlined below. The State Library is also actively planning the improvement of information services to government agencies and is developing its support for the school and college library network. It works closely with the libraries at the TCAE and the University of Tasmania and has extensive links with libraries on the Australian mainland and overseas.

Lending Services

Through a regional library system comprising over 90 service points and bookmobiles the State Library provides approximately 980 000 lending items including books, records, cassettes, recorded books, film, audio visual kits, periodicals and other library materials. Annual loans of these items exceed 4.3 million. Prominent among the library's lending services are those to the housebound, the sight handicapped, migrant groups and young children.

Organisation

The State Library Service is administered from its headquarters in Hobart through seven divisions within which related services and functions are grouped as follows:

Regional Library Services

Regional services are provided by the Hobart Lending Library and six Regional Library Systems each of which is responsible for the management of all public library services within the municipalities forming its particular region.

Channel Regional Library System: This serves 27,000 people centred on Kingston from a temporary central library.

Derwent Regional Library System: Serves 66,000 people centred on Glenorchy. A new central building for the region opened in January 1979.

Hellyer Regional Library System: serves 60,000 people in the north-west and west coast from a modern central building in Burnie.

Mersey Regional Library System: serves 45,000 people in the central north coast from temporary premises in Devonport. A new regional library headquarters is scheduled for completion in 1983.

Northern Regional Library System: serves 114,000 people from a modern central library in Launceston.

Tasman Regional Library System: serves 56,000 people in eastern Tasmania from temporary premises at Bellerive. A site for a regional headquarters building is under investigation.

Hobart Lending Library: provides a service to over 33,000 borrowers from the headquarters library.

Performing Arts Collection: contains over 6,900 films and approximately 200,000 records and cassette tapes. Films and records are available for borrowing by individuals and organisations.

The following table shows the distribution of branch libraries, depots, bookmobiles and books held throughout these regions and in the State Headquarters.

Public Libraries, Tasmania, 30 June 1982

Regional System	Buildings			Book- mobiles	Items held ('000)	Items borrowed ('000)
	Central	Branch	Depots (a)			
State Library Headquarters	1					
State Reference Library					179	—
Special Collections					32	—
Reserve Collections					112	—
Hobart Lending Library					253	712
Channel Region	—	6	—	1	71	322
Derwent Region	1	14	1	1	128	727
Hellyer Region	1	14	—	1	164	575
Mersey Region	—	6	1	1	65	377
Northern Region	1	23	9	2	263	1 162
Tasman Region	—	9	1	1	84	516
Total	4	72	12	7	1 351	4 391

(a) Comprises a small collection of materials not housed in a separate building or room.

Reference and Information Services

State Reference Library: Coordinates information services throughout the system. Special attention is given to the needs of research workers in both the public and private sector. A large collection of directories, indexes, abstracting tools and computerised data bases are available in addition to the holdings of books, periodicals, newspapers, maps and other items.

Government Department Libraries: The State Library assists and coordinates the provision of an information service to government agencies.

Special Collections: The State Library houses unique collections of books and documents relating to Tasmania. These collections include: (i) the Tasmanian Collection - a definitive collection of books published in Tasmania; (ii) the W.L. Crowther Library - a large research collection of books, pamphlets and other items relating to Tasmania and Australia; and (iii) the Allport Library and Museum of Fine Arts - comprising a collection of antique furniture, china, glass, silver, pictures, prints and rare books in fine editions.

Parliamentary Library: A legislative reference service is provided to both Houses in association with the Parliamentary Library Committee.

Technical Services

This Division controls the selection, purchase and disposition of all materials throughout the system in close consultation with specialist and regional staff, and is responsible for the acquisition, cataloguing and classification of all materials added to the State Library. Extensive use is made of computer technology. Book binding and the conservation of library materials form two important activities within the Division.

Archives Office

Under the *Archives Act* 1965 the Archives Office of Tasmania is the official repository for all non-current State and Local Government records. A considerable quantity of private records of individuals, companies, associations, societies, and institutions is also held. Public research facilities are provided.

School Libraries

The Library Services Branch of the Education Department of Tasmania is also housed in the State Library building. This Branch, previously known as the Education Division, is responsible for: (i) developing effective library support services to schools; (ii) consultancy and advisory services on library matters in all educational areas; and (iii) liaison with all appropriate branches of the Education Department.

The Branch is engaged in the planning of new libraries, conduct of in-service education programs, professional advice to teachers and teacher-librarians, preparation

of library funding programs, operation of computer-based cataloguing services and provision of curriculum resource information services.

A function of the Branch is to co-ordinate with the State Library the development of state-wide library services in a co-operative network, especially in the area of technical services such as cataloguing and circulation control. It also has a major objective to develop resource-sharing networks amongst like institutions.

Libraries under the control of professional teacher-librarians have been established in 151 schools and colleges of the Education Department and in several non-government schools. Advisory services are available to all of the approximately 350 schools and colleges in the State. The resource-buying budget in this area is well in excess of \$500 000 per annum and is supplemented by three regional pool collections of learning and teaching resources.

Management Services

This section is responsible for the provision of secretariat services for the State Library, the initiation and co-ordination of policy, research and development advice on expenditure priorities, the co-ordination of systems planning and implementation, staff development and publicity.

Administration

The administration is responsible for advising the State Librarian and other senior officers on staffing, finance, and general administration matters.

Expenditure

The following table shows the main expenditure items for the State Library Department for recent years:

State Library Department Expenditure, Tasmania
(\$'000)

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Salaries and pay-roll tax	2 599	3 067	3 540	3 896	4 572	5 154
Purchase of books, etc	790	910	893	1 046	839	914
Other	725	893	1 211	1 279	1 214	1 299
Total expenditure	4 114	4 870	5 644	6 221	6 625	7 367

CULTURAL ACTIVITIES

Tasmanian Museum and Art Gallery

History

The Tasmanian Museum and Art Gallery has its origins in early scientific groups formed in Hobart Town in the 1820s and 1830s. In 1853 the Royal Society of Tasmania established a museum which was later vested in a Government Board of Trustees in 1885. The first building on the present site, on the corner of Argyle and Macquarie Streets, was designed by the city's best-known colonial architect, Henry Hunter (1832-1892), and completed in 1863. Later additions were made in 1889, 1901, 1966 and 1979. The income of the Museum is provided mainly by an annual grant from the State Government.

Activities

The Tasmanian Museum and Art Gallery houses collections in the fields of fine and applied art, zoology, geology, botany, history, anthropology and applied science. It is an integrated institution concerned with the whole range of natural and human heritage with particular emphasis on Tasmanian exhibits.

The Museum's traditional function, and still the major part of its operation today, is to collect, conserve, study and display items of cultural or scientific value to the

community. It now performs a wide variety of additional roles, which include a continuing program of travelling exhibitions and a school education service which utilises the *Musbus*, a van specially equipped for transporting museum displays.

Curators, in addition to working on collections and research on related subjects, handle public inquiries which touch on their fields. Display staff are responsible for installing museum displays, publicity and museum publications. The Museum also employs experts in art conservation and taxidermy. The Tasmanian Herbarium, currently housed in the Botany Department of the University of Tasmania, is part of the Museum.

Collections

Art: The Gallery has a comprehensive collection of Australian paintings, drawings, prints and sculpture from the early nineteenth century to the present day. The collection places particular emphasis on art of the colonial period in Tasmania, with large groups of paintings by Glover, Duterrau, Bull, Gould, Wainwright, de Wesselow, T.E. Chapman, Louisa Anne Meredith, Skinner Prout and others. There are also some important European works of the nineteenth and early twentieth centuries by Beechy, Bouguereau, Poynter, Rodin, Epstein, Sickert and Gilman. The collection of eighteenth and nineteenth century English watercolours is one of the finest in Australia. The Gallery also collects nineteenth and twentieth century prints and photographs.

The applied arts collection includes nineteenth century European and Australian costumes, silver, china and glass and a collection of contemporary Australian ceramics and works in metals and fibres. Asian material includes a collection of jade carvings and Japanese netsuke.

History: The presentation of colonial history is highlighted by articles such as Andrew Bent's press of c. 1825 and Lady Franklin's sedan chair (c. 1840), and by a comprehensive maritime (including whaling) collection. A photograph collection covers the period from the mid-1850s to the present day. Coins and medals, including a collection of Greek, Roman and early British coins, and early time-pieces are other notable historical collections.

Anthropology: Tasmanian Aboriginal culture is represented by tools and artifacts, and stone carvings from Mount Cameron West in north-western Tasmania. There is a Melanesian collection assembled earlier this century, and representative Australian material.

Zoology: Present displays of vertebrate animals feature Tasmania's land mammals and birds, together with reptiles and marine life. Tasmanian invertebrates on show include insects, spiders, crabs, mollusc shells and sea stars. An extensive reference collection of Tasmanian animals is maintained for scientific study. The Museum safeguards many type specimens (original examples on which description of new species have been based).

Geology: Rocks, minerals and fossils of predominantly Tasmanian origin are on display. Notable exhibits include the skeletons of *Wynyardia*, the 20-million-year-old marsupial from Wynyard, and *Zygomaturus*, a giant marsupial, the Chidley Mineral Collection and the world famous mineral crocoite from Tasmania's west coast. The reference collection houses rocks and minerals, including the Petterd Mineral Collection, and fossils, which include many type specimens, mostly from Tasmania.

Botany The Herbarium is at present housed at the University of Tasmania. It includes specimens collected early in Tasmania's history by R. C. Gunn, many of which are type specimens. Other early collectors represented include Archer, Meredith, Milligan, Stuart and Spicer. The Herbarium's current holdings number about 90 000 specimens of Tasmanian plants.

Queen Victoria Museum and Art Gallery

The Queen Victoria Museum and Art Gallery was established by the Tasmanian Government in 1891. Since 1895 it has been vested in the Launceston Corporation and has received an annual State Government grant. It serves the northern half of Tasmania

and its public galleries contain collections and exhibits of special relevance to the natural and cultural environment of Tasmania. Educational, research and information services are provided. The Museum is regularly patronised by local, interstate and overseas researchers and sightseers.

The Museum operates a Zeiss Medium-type Planetarium seating 66 people in a comfortable, air-conditioned auditorium beneath a celestial dome eight metres in diameter. Various sessions are conducted for the general public and for school groups. It has its own air-conditioned theatrette seating 166 people and a reference library of scientific and historical books and journals. The arms and armour collection is one of the finest in Australia and there are also extensive collections of Tasmanian animals, plants, artifacts, geological specimens, historical material, craft, decorative art and fine art.

The education office of the Queen Victoria Museum and Art Gallery provides a service to schools throughout northern Tasmania, lending a wide range of items for teaching aids and assisting with teaching programs in the public galleries. In 1979, with the assistance of the Australian National Railways Commission, a rail car was fitted out to display Museum materials and this will be stationed for short periods at various towns serviced by rail in northern Tasmania. Though primarily designed as a teaching aid for district schools, it is also open to the general public.

The Museum's main annexe is Macquarie House in Launceston's Civic Square. The displays within Macquarie House centre on Launceston's history, through the eyes of its architecture. As well, the two annexes at Launceston's Cataract Gorge, the Band Rotunda and the Gorge Interpretation Centre, have displays emphasising the historic, recreational and cultural importance of the Gorge to the Launceston community.

In addition to the Director there are seven curatorial staff and 22 other staff members. Research is undertaken both in the field and in the institution. The results of such programs are regularly published in the Museum's own journal, *Records of the Queen Victoria Museum*, and other research publications.

The Performing Arts

The organisation and presentation of the performing arts in Tasmania has been subject to a process of continual change. During the early 1970s, four performing arts companies were set up and subsequently funded by both Federal and State Governments. They were the Tasmanian Theatre Company, Tasmanian Opera Company, Tasmanian Ballet Company and Tasmanian Puppet Theatre. However, by 1976 it was apparent that the maintenance of full-time drama, opera and dance companies in Tasmania was not feasible considering the subsidies available and the population of the island.

In 1977, the Tasmanian Theatre Company adopted an entrepreneurial role by promoting tours of Tasmania by other theatrical companies from Australia and overseas. In 1978, following the termination of the Tasmanian Opera Company and the discontinuance of Federal Government grants to the Tasmanian Ballet Company, the Tasmanian Theatre Company widened its theatrical interests, to include music and dance in its presentations. In 1979, following an initiative from the Minister for the Arts, the Tasmanian Theatre Company co-ordinated and promoted a full 12-month program of drama, opera and dance in Tasmania.

In 1976 the Tasmanian Theatre Company's youth activities became a separate identity and now operates as the Salamanca Theatre Company, presenting a theatre-in-education program throughout the State. The Tasmanian Arts Council is an entrepreneurial body mainly involved in operating a touring program to schools and country areas.

In 1980, the Tasmanian Ballet Company and the Tasmanian Puppet Theatre were wound up. In their place, the new Tasmanian Dance Company presents a dance-in-education program, the first of its kind in Australia. The Terrapin Puppet Company has been formed to tour puppet presentations to schools. The Polygon Theatre Company is

a regional touring drama company which presents adult and curriculum plays with Tasmanian actors.

Music

The Australian Broadcasting Commission maintains the Tasmanian Symphony Orchestra which is resident at the Odeon Theatre, Hobart, the only concert venue owned by the ABC in Australia. The Tasmanian Symphony Orchestra presents concert series for adult and youth audiences, special performances for schools and accompanies visiting professional opera companies. In 1979 the Orchestra accompanied the Australian Ballet in performances in Greece and Israel. The Orchestra plays for theatre performances of the Victoria State Opera.

Music Viva presents a comprehensive chamber music program at the University Centre, Hobart and a smaller program in the north and north-west of the State.

A recently formed Tasmanian Chamber Orchestra is resident in Hobart.

Professional training is offered at the Conservatorium of Music. Artists in residence at the Conservatorium form the Petra String Quartet which tours Tasmania and the mainland encompassing the school, college, conservatorium and university circuits.

Funding Bodies

Funds are made available to performing arts organisations through the Theatre, Music and Community Arts Boards of the Australia Council and through the Tasmanian Arts Advisory Board. The Tasmanian Arts Advisory Board consists of up to six members and a Chairman appointed by the Tasmanian Minister responsible for the Arts.

Theatres

Theatre Royal, Hobart: This theatre, which opened in 1837, is the oldest theatre in Australia. There are three levels of audience seating: stalls, dress circle with two boxes and an upper circle, with a total capacity of 743. Finance available from Federal and State Governments over the last eight years has enabled extensive maintenance to be done and backstage additions, including new dressing rooms, office facilities and a new heating system, have been commenced. The Theatre Royal is managed by the Theatre Royal Board which is appointed by the Tasmanian Government.

Princess Theatre, Launceston: This is the largest theatre in Tasmania, seating 1 072 on two levels—stalls and dress circle. It was built for live theatre in 1911, and was also used extensively as a cinema for many years. In 1970 it was purchased by the Launceston City Council and renovated as a live theatre with modern dressing rooms and facilities. Extensions and alterations since then include the installation of a full counterweight system and interior decoration. The Princess Theatre is managed by the Launceston City Council.

Civic Centre, Burnie: This is a new complex built by the Burnie Council and completed in 1976. It features an art gallery, the Town Hall and a theatre. The auditorium of the Civic Theatre seats 418 on one level.

Town Hall Theatre, Devonport: Newly converted into a raked auditorium on one level, this theatre seats 470.

Further References

ABS Publications Produced by the Tasmanian Office

- Government Schools, Tasmania (4204.6), annual.
- Non Government Schools, Tasmania (4205.6), annual.
- Tertiary Education, Tasmania (4203.6), annual.

ABS Publications Produced by the Canberra Office

- National Schools Collection: Government Schools, Australia (4215.0), annual.
- School Enrolments, Australia (Preliminary) (4201.0), annual.
- Colleges of Advanced Education, Australia (Preliminary) (4205.0), annual.

Colleges of Advanced Education, Australia (4206.0), annual.
University Statistics, Australia (Preliminary) (4207.0), annual.
University Statistics, Part 1: Students (4208.0), annual.
University Statistics, Part 2: Staff and Libraries (4209.0), annual.
Education Experience and Intentions Survey, Australia (Preliminary) (4211.0), sole issue, 1979, released October 1980.
Expenditure on Education, Australia (5510.0), annual.

Other Publications

Annual Reports of the Education Department, Tasmania (Government Printer, Hobart).

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Chapter 8

SOCIAL WELFARE AND HEALTH SERVICES

WELFARE

Introduction

In Australia, the principal social welfare benefits are provided by the Federal Government under the *Social Security Act* 1947, as amended, which is administered by the Federal Department of Social Security. Finance for the benefits is provided from the National Welfare Fund which is augmented each year from the Consolidated Revenue Fund by an amount equal to the payments made.

State social welfare, which covers child welfare and relief, is administered by the State Department of Community Welfare.

Federal Department of Social Security

The following table shows expenditure in Tasmania from the National Welfare Fund on benefits under the Federal *Social Security Act*:

Social Security Payments Under the Social Security Act, Tasmania
(\$'000)

Benefit or service	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Age and invalid pensions (a)	91 788	107 203	117 678	127 382	142 519	163 130
Widows' pensions	12 455	14 660	16 621	18 844	21 003	23 160
Supporting parent's benefit (b)	5 578	6 573	7 494	8 301	13 591	20 139
Maternity allowances	215	213	(c) 91	—	—	—
Family allowances (d)	31 197	30 968	(e) 28 924	30 549	27 765	30 320
Handicapped child's allowance	345	385	407	481	529	689
Double orphan's pension	66	52	54	57	53	62
Unemployment benefits	17 963	23 398	28 609	29 665	34 658	49 233
Sickness benefits	2 380	2 385	2 024	2 299	2 901	3 595
Special benefit	979	804	1 299	1 487	2 372	2 956
Rehabilitation services	526	461	519	805	1 592	1 456
Sheltered employment allowances	474	637	745	1 064	1 386	1 731
Funeral benefit	43	43	39	42	43	42
Total	164 011	187 782	204 507	220 976	248 412	296 513

(a) Includes wives' pensions.

(b) Prior to November 1977, benefit was payable to supporting mothers only.

(c) Payments in respect of births occurring prior to 1 November 1978.

(d) Family allowances replaced child endowment and student endowment from July 1976.

(e) Payments affected by change in eligibility of students receiving payments from Commonwealth education schemes and rescheduling of payment dates associated with the change from four weekly to monthly payments.

Federal activity in social services began with the passage of the Federal *Invalid and Old Age Pensions Act* 1909. This and the *Maternity Allowances Act* were administered by the Department of the Treasury until 1941 when the Department of Social Services commenced to function as a separate organisation. Later, the functions of the Department were widened with the passing of the *Child Endowment Act*, the *Widows' Pensions Act*

and the *Unemployment and Sickness Benefits Act*. A referendum held in 1946 empowered the Federal Government to legislate for the provision of certain social services formerly provided by the states. In 1947, a consolidated *Social Services Act* was passed. Other major acts administered by the Department include the *Aged or Disabled Persons Homes Act* 1954, the *Handicapped Persons Assistance Act* 1974, and the *Homeless Persons Assistance Act* 1974.

Pensions and Benefits

Social Security benefit rates which applied as the result of recent legislation are set out in the next table:

Social Security Benefits, 1980 and 1981: Maximum Rates, Tasmania
(**\$ Per Week Unless Noted as Monthly Payments**)

<i>Benefit</i>	<i>1981 Amending legislation</i>	<i>1982 Amending legislation</i>
Age and invalid pensions and sheltered employment allowances—		
Single person	69.70	74.15
Single person with dependent child or children (a)	75.70	78.65
Married couple (both eligible and living together), each (b) ...	58.10	61.80
Wife (if not a pensioner)	58.10	61.80
Widows' pensions—		
Class A (widows with dependent child or children) (a)	75.70	80.15
Class B	69.70	74.15
Class C	69.70	74.15
Supporting parent's benefit (a)	75.70	80.15
Unemployment, sickness and special benefits—		
Single person (under 18 years)	36.00	36.00
Single person (18 years and over)—		
Sickness beneficiaries	69.70	74.15
Others with no dependants	58.10	58.10
Others with at least one dependant	69.70	74.15
Married person	116.20	123.60
Additional pension or benefit for each child (c)	10.00	10.00
Supplementary assistance/allowance (d)	5.00	8.00
Family allowances (monthly rates)—		
One child	15.20	15.20
Two children	36.90	36.90
Three children	62.90	75.90
Four children	88.90	114.90
For each subsequent child	30.35	45.55
Handicapped child's allowance (monthly rates)	73.00	73.00
Double orphan's pension (monthly rates)	55.70	55.70
Funeral benefit (single lump sum payment) (e)	40.00	40.00

(a) Includes mother's/guardian's allowance of \$6.00 a week. This allowance is payable at the rate of \$8.00 a week where the pensioner or beneficiary has a child under 6 years or an invalid child in his or her care.

(b) Where pensioner couples are living apart because of illness or infirmity, they each may be paid at the single rate.

(c) Paid to a pensioner or beneficiary in respect of each child under 16 years and each full time student aged 16 to 24 years who is wholly or substantially dependent on that person.

(d) Paid to pensioners, supporting parent beneficiaries and to sickness beneficiaries (who have been receiving the benefit for a continuous period of six weeks) who pay for lodgings or rent and who have little or no income apart from their pension or benefit.

(e) If the person liable for the funeral costs is not a pensioner, the funeral benefit will be \$20.

In the previous table a description was given of the various Social Security pensions, benefits, etc. The rates and conditions are varied from time to time by amending legislation. Currently twice yearly, automatic indexation adjustments are made to most pensions and benefits. The Federal Treasurer outlines social security proposals in his budget and these are implemented in later acts.

Income Test

The same income test applies with respect to all pensions and supporting parent's benefit. Blind persons, however, may receive the maximum rate of pension free of the income test. Unemployment and sickness benefits and eligibility for fringe benefits and supplementary assistance are subject to different income tests.

Age and Invalid Pensions

Generally pensions are payable to persons who have been resident in Australia, New Zealand or the United Kingdom for 10 years. (Reciprocal agreements exist with New Zealand and the United Kingdom.)

The qualifying ages for aged pensions are 65 years for men and 60 years for women; invalid pensions are payable to persons over 16 years of age who are permanently incapacitated for work (to the extent of at least 85 per cent) or are permanently blind. Sheltered employment allowance is paid as an alternative to the invalid pension to invalids who take work in approved sheltered employment. Additional allowances are payable for dependants under certain conditions.

Under the income test, the maximum rate of pension is reduced by \$1 for every \$2 by which income as assessed exceeds the 'free' areas of \$30 per week for a single person and \$50 for a married couple.

The 1973 Budget abolished the means test for all people aged 75 years or more and an amending Act passed in April 1975 abolished the means test for all persons aged 70 years or more. From August 1978, the income test has been re-introduced for all pensions except in cases of persons who are permanently blind. However, the income test was not to apply to persons aged over 70 in respect of the level of pension received in August 1978 but pension increases for such persons are subject to the income test.

On the death of one of a married pensioner couple, the survivor receives six fortnightly instalments at the married couple rate before reduction to the single rate.

Wives' Pensions

Where the wife of an age or invalid pensioner is not qualified for an age or invalid pension in her own right, and she is not a service pensioner, she may receive a wife's pension.

Widows' Pensions

These were first introduced in 1942. If the claimant and her husband were not residing permanently in Australia when she became a widow, the claimant must have resided in Australia for five years immediately prior to the claim, or must have resided in Australia for a continuous period of 10 years at any time. (Reciprocal agreements exist with New Zealand and the United Kingdom.)

The classes of widows are as follows: (i) a class A widow has one or more dependent or student children in her care; (ii) a class B widow is at least 50 years of age, or 45 years when her class A pension ceases (because she no longer has a child in her care); and (iii) a class C widow is under 50, without children, and in necessitous circumstances in the 26 weeks following her husband's death. The term 'widow' includes a deserted wife, a divorcee and a woman whose husband has been imprisoned for at least six months. Certain 'dependent females' may also qualify for pension.

Supporting Parents' Benefit

Supporting mother's benefit was introduced in 1973 and was extended in 1977 to include males and renamed supporting parent's benefit. The benefit may be payable to a person who has the custody, care and control of a child and who is a male divorcee, a widower, a separated husband or wife or a separated defacto husband or wife. The benefit may also be payable to an unmarried parent or a sole parent who supports a child for any other reason and who does not qualify for a widow's pension.

Amending legislation, effective from 1 November 1980, removed the six months' qualifying period for the commencement of a supporting parent's benefit. The benefit is now payable from the first benefit payday after the event which gave rise to eligibility, e.g. separation or birth of a child. This change not only had the immediate effect of increasing the number of claimants for supporting parent's benefit but has reduced the number of persons receiving widows' pensions as there is little reason to change from the benefit to the pension.

The following table shows, for Tasmania, the number of persons receiving age, invalid and widows' pensions, and supporting parents' benefits, and the amounts paid out in pensions and allowances:

Age, Invalid and Widow Pensioners and Supporting Parents' Benefits, Tasmania						
Particulars	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Age and invalid pensions—						
Number of age pensioners (a)—						
Males	12 114 (b)	12 792	13 122	13 363	13 408	13 484
Females	24 840 (b)	25 412	25 763	26 203	26 592	26 929
Persons	36 954 (b)	38 204	38 885	39 566	40 000	40 413
Number of invalid pensioners (a)—						
Males	4 401 (b)	4 162	4 365	4 397	4 456	4 592
Females	2 211 (b)	2 043	2 052	1 979	2 031	2 023
Persons	6 612 (b)	6 205	6 417	6 376	6 487	6 615
Number of wife pensioners (a)—	2 360	2 547	2 641	2 689	2 622	2 571
Amount of pensions paid \$'000	91 788	107 203	117 678	127 382	142 519	163 130
Widows' pensions—						
Number (a)	4 572	5 001	5 229	5 358	(c) 5 230	5 153
Amount paid \$'000	12 455	14 660	16 621	18 844	21 003	23 160
Supporting parent's benefit—						
Number (a)	1 778	1 984	2 057	2 260	(c) 3 519	3 920
Amount paid \$'000	5 578	6 404	7 494	8 300	13 591	20 139

(a) At 30 June.

(b) Figures affected by transfer to age pensions of residentially qualified invalid pensioners who had reached age pension age but who were not transferred in previous years.

(c) Figures affected by changes in eligibility criteria for supporting parent's benefit (see text).

Fringe Benefits

Pensioners and supporting parents beneficiaries, subject to an income test, can obtain a range of free pharmaceuticals; free optometrical consultations from participating optometrists; free medical treatment if the treating doctor bulk bills or 85 per cent of schedule fee subject to a maximum payment of \$5; a telephone rental concession; a mail redirection concession; hearing aid services; and fare reductions on Commonwealth Government rail and shipping services.

Unemployment, Sickness and Special Benefits

To receive unemployment benefits, a person must be out of work (but not through being a direct participant in a strike or due to industrial action by other members of a trade union of which the person is a member), must be capable of undertaking and willing to undertake suitable work and have taken reasonable steps to obtain employment. Registration with the Commonwealth Employment Service is necessary; payment is at the discretion of the Department of Social Security.

Sickness benefits may be paid to a person temporarily unable to work because of sickness or injury and who has suffered a loss of income because of this. A married woman is not eligible to receive a sickness benefit if it is reasonably possible for her husband to maintain her. Where the husband is able to maintain her partially, a benefit may be paid at a rate considered reasonable in the circumstances.

Benefits are not payable to people qualified to receive invalid, age, widows' or service pensions, supporting parents' benefits, or tuberculosis allowances. The minimum age is

16 years, the maximum 65 (male) and 60 (female). There are no nationality restrictions, but if a claimant has not been resident in Australia for one year before making the claim, the Department must be satisfied that he intends to live here permanently.

A special benefit may be granted to a person not qualified for a pension or an unemployment or sickness benefit if, because of age, physical or mental disability, domestic circumstances, or for other valid reasons, he is unable to earn a sufficient livelihood for himself and his dependants. Recipients of special benefits include, among others, persons caring for invalid parents and persons ineligible for age, invalid or widows' pensions because of lack of residence qualifications.

The next table gives Tasmanian details for unemployment, sickness and special benefits:

Unemployment, Sickness and Special Benefits, Tasmania Beneficiaries and Payments							
Particulars		1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Unemployment benefits—							
Claims granted	no.	23 860	27 337	26 294	26 316	28 234	32 147
Persons on benefit—							
At 30 June	no.	7 078	9 757	10 420	11 121	12 929	16 175
Weekly average	no.	7 161	8 538	10 295	10 579	11 496	14 517
Benefits paid	\$'000	17 963	23 398	28 609	29 665	34 658	49 233
Sickness benefits—							
Claims granted	no.	4 635	4 284	3 881	3 559	3 626	3 707
Persons on benefit—							
At 30 June	no.	959	816	731	895	953	878
Weekly average	no.	933	887	709	746	870	914
Benefits paid	\$'000	2 380	2 385	2 024	2 299	2 901	3 595
Special benefits—							
Claims granted	no.	1 822	1 792	2 071	2 051	3 463	3 999
Persons on benefit—							
At 30 June	no.	469	516	556	616	808	774
Weekly average	no.	461	476	525	571	769	838
Benefits paid	\$'000	979	804	1 299	1 487	2 372	2 956
Total benefits—							
Claims granted	no.	30 317	33 413	32 246	31 926	35 323	39 853
Persons on benefit—							
At 30 June	no.	8 506	11 089	11 707	12 632	14 690	17 827
Weekly average	no.	8 555	9 901	11 529	11 850	13 135	16 269
Benefits paid	\$'000	21 322	26 587	31 933	33 451	39 931	55 784

Income Taxation Applicable to Pensions and Benefits

Income from age, wives' or widows' pensions and supporting parents', unemployment, sickness or special benefits is classified as taxable income but the amount received in a full year is usually less than the level at which income tax becomes payable. Supplementary assistance, guardians' or mothers' allowances and additional benefits for children are not taxable for aged, wives' or widows' pensions and supporting parent's beneficiaries. If other income is earned and this raises total income above the minimum level, normal income tax provisions apply. Invalid pensions are exempt from taxation unless the invalid is of age pension age.

Double Orphan's Pension

The 1973 Budget introduced the double orphan's pension, which is payable to institutions or persons caring for a child whose parents are both dead or one parent is dead and the other parent cannot be located. At 30 June 1982 there were 122 orphans for whom pensions were being paid. Total payments in 1981-82 were \$62 000.

Handicapped Child's Allowance

The handicapped child's allowance is payable to the parent or guardian of a physically or mentally handicapped child who is living in the family home and needs constant, or

almost constant, care and attention. At 30 June 1982, allowances were being paid with respect to 742 severely handicapped and 117 substantially handicapped children. Payments during 1981-82 totalled \$689 000.

Family Allowances

Legislation in June 1976 abolished tax rebates in respect of dependent children but this was offset by significant increases in family allowance (previously called 'child endowment') payments payable to persons (usually the mother) with dependent children. Family allowances are not subject to automatic annual indexation and have remained unchanged since 1 July 1976. One year's residence in Australia is required if the mother and child were not born here, but this requirement is waived if the Department is satisfied they intend to remain here permanently. Students aged 16 to 24 receiving payments under the Tertiary Education Assistance Scheme and certain other Commonwealth education schemes are excluded from eligibility. During 1978-79 the payment cycle was changed from four-weekly to monthly.

The following table shows family allowance statistics for Tasmania for recent years:

Family Allowances, Tasmania						
Dependants (Children under 16 and Students under 25 years) and Payments						
Particulars		1976-77	1977-78	1978-79	1979-80	1980-81
Dependent children and students						
(a) —						
Children in endowed families		no.	129 054	127 806	125 359	124 203
Children in approved institutions		no.	340	292	244	209
Total		no.	129 394	128 098	125 603	124 412
Amount paid during year \$'000			31 197	30 968	28 924	30 549
				(b)		27 765

(a) Number at 30 June.

(b) Payments affected by rescheduling of payments dates resulting from change from four-weekly to monthly payments.

Commonwealth Rehabilitation Service

This service aims to fit disabled people for employment by supplying medical and hospital treatment, surgical aids and appliances and, where necessary, arranging special education and training courses in industry, trade, commerce, public service, etc. Although employment is specifically the responsibility of the Federal Department of Employment and Industrial Relations vocational counsellors arrange employment with suitable employers and follow up progress.

Rehabilitation training is given if the disability is a substantial handicap to engaging in full employment. Disabled people who do not qualify for free service may pay for rehabilitation themselves or may be sponsored by private or government organisations. In Tasmania, the Department's rehabilitation centre is located in Hobart at the Douglas Parker Rehabilitation Centre. There are also Regional Units of the Commonwealth Rehabilitation Service located at Launceston and Burnie where vocational counsellors, occupational therapists and social workers are available to assist the handicapped.

Amendments made to the *Social Security Act* in November 1977 enable assistance to be offered to all handicapped people, within the broad working age group, who would derive substantial benefit from the types of programs the Service offers.

The following table shows the numbers accepted for rehabilitation and placed in employment in Tasmania:

Operation of the Rehabilitation Service, Tasmania

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Persons—						
Accepted for rehabilitation no.	159	169	310	492	466	548
Placed in employment no.	101	79	70	116	143	218
Expenditure (a) \$'000	525	461	519	805	1 592	1 456

(a) Excludes capital expenditure on sites and buildings and administrative costs of the Rehabilitation Service.

Douglas Parker Rehabilitation Centre

The Douglas Parker Rehabilitation Centre in Hobart is a joint Commonwealth-State project designed to provide a modern rehabilitation facility for Tasmania.

A formal agreement with the Tasmanian Government on the operation of the centre was signed by the Minister for Social Security in October 1980 and the total complex was completed and fully operational in March 1982.

The centre provides treatment and training facilities for 120 adults and 80 children and accommodation for approximately 50 rehabilitees.

Homes for the Aged or Disabled

The *Aged or Disabled Persons Homes Act 1974* provides for building subsidies and separate land subsidies on a \$2 for \$1 basis (up to a maximum amount, which is determined from time to time). The current maximum subsidies are for a single unit, \$14 000; double unit, \$16 240; and for land for a unit, \$1 920. These subsidies are payable to approved organisations intending to build or acquire homes for aged or disabled persons. The aim is to provide homes in which the conditions approach normal domestic life. ('Homes' in this context does not refer to houses built under Federal-State Housing Agreements.)

During 1981-82, four grants were approved under the *Aged or Disabled Persons Homes Act 1974*; the amount granted was \$495 103. This Act provides for assistance towards providing accommodation for frail, aged people.

Personal Care Subsidy: A subsidy is payable to eligible organisations in respect of all persons who receive approved personal care in hostel-type accommodation in an aged persons' home eligible under the *Aged or Disabled Persons Homes Act 1974*, and for whom National Health Benefit is not received. This subsidy was increased from \$20 to \$30 per week per person in respect of all subsidies falling due from July 1982. During 1981-82, 22 organisations cared for 569 qualified residents and received subsidies totalling \$607 840.

Delivered Meals Subsidy: A subsidy at the rate of 50 cents (plus five cents if vitamin C supplement provided) for each delivered meal is payable to approved organisations providing a 'meals-on-wheels' service. In 1981-82, 31 organisations in Tasmania provided approved meal services, and subsidy payments totalled \$136 996.

Handicapped Persons Welfare

The *Handicapped Persons Assistance Act 1974* provides assistance for the following prescribed services relating to handicapped or disabled persons: (i) training; (ii) activity therapy; (iii) sheltered employment; (iv) residential accommodation; (v) holiday accommodation; (vi) recreational facilities; and (vii) rehabilitation facilities.

Assistance toward approved expenditure is given to organisations under the Act by a \$4 for \$1 subsidy towards: (i) the capital cost of projects; (ii) the cost of building maintenance; (iii) the rental of premises; and (iv) the cost of equipment. In addition salary subsidies of up to 100 per cent are payable for the first two years after an organisation has commenced to provide a prescribed service and a 50 per cent subsidy is payable in all other cases. A training fee of \$500 is payable to a sheltered workshop for each disabled

person placed in open employment for a period of not less than 12 months. Federal Government expenditure in Tasmania on assistance to handicapped persons under the *Handicapped Persons Assistance Act* in 1981-82 was \$1 500 000.

Homeless Persons Assistance

Assistance by way of capital grants and subsidies is made towards the operating costs of voluntary welfare organisations and local government bodies which provide accommodation, meals and welfare services to chronically homeless people. The rates paid to eligible organisations are \$1.35 per day for each person provided with food and accommodation or 45 cents for each meal where accommodation is not provided. In 1981-82 the total expenditure on subsidies and grants under the *Homeless Persons Assistance Act* was \$67 962.

Child Care

Organisations may receive financial assistance for a range of child care projects including full day care, occasional and emergency care. Both capital and recurrent grants are available.

Expenditure in 1981-82 exceeded \$1 372 003 on some 49 projects.

Migrant Welfare

Social workers are available to assist people with personal problems. An ethnic liaison officer can also assist migrants and refugees with pensions and benefits matters. There are also migrant welfare officers with the Federal Department of Immigration and Ethnic Affairs and a telephone interpreter service available to assist migrants.

State Department for Community Welfare

The broad objective of the Department is to enable individuals and families who require help to function in society to the best of their ability. The Department recognises the welfare of the individual as the basis of the welfare of the Tasmanian community, and ultimately the wider society of which we are a part. It is further recognised that most individuals are either members of families, or have been so for important parts of their lives. Financial hardship, societal pressures, marital conflict, disturbed children, as well as other stresses can impair the functioning of individuals, and of families. The State has a responsibility both directly and indirectly, to enhance the functioning and self-esteem of individuals, to assist in the preservation, strengthening or restoration of the family unit, and to mitigate the effects of disruptions.

The Department's services are provided through its three Regional Offices, and its three Area Offices in each Region as well as through its Family Group Homes and residential institutions. The services and expenditure of the Department are grouped under four headings: Relief, Child Welfare, Grants to Organisations and Administration and General.

Department for Community Welfare, Tasmania: Expenditure (\$'000)

<i>Particulars</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>
Administration and general	2 192	2 540	2 943	3 274	4 038	4 609
Relief Division	1 734	2 187	2 616	2 878	1 759	1 194
Child Welfare Division	830	945	1 053	1 152	1 183	1 243
Grants to organisations	361	496	630	828	1 208	1 421
Total	5 117	6 168	7 242	8 132	8 188	8 467

Relief Division

The functions of this Division are to investigate applications for assistance from parents with dependent children and to give food vouchers or cash relief where necessary; to issue heating allowances (subject to an income test) to age, invalid and widow

pensioners; and to help pay for funerals, transport, furniture removals, spectacles, etc. for persons in needy circumstances.

Child Welfare Division

The *Child Welfare Act 1960*, and subsequent amendments, is the statutory authority for a wide range of work. Other special aspects of the work are covered by the *Adoption of Children Act 1968*, *Domestic Assistance Service Act 1947*, and the *Child Protection Act 1974*, as well as some Federal legislation, i.e. *Family Law Act*, *Immigration (Guardianship of Children)*. In carrying out its mandate in these areas the Department's main focus is the welfare of the family, with the interests of children being the primary concern.

At 30 June 1982, the Department employed 627 child welfare officers who provide a range of direct personal services to children and families. Voluntary supportive casework is offered to families who are experiencing difficulties and need help. Homemaker services as well as financial assistance are provided as necessary. In providing residential care for children and young people, the Department's view is that, wherever reasonably possible, this should be supplementary to the care provided by natural parents, rather than substituting for it.

For young offenders the Department considers that the best interests of both the individual and the community are most appropriately met by a positive and supportive approach designed to promote self-value and responsibility, as well as by developing opportunities for the individual to adopt a more socially acceptable way of life. Children who appear before the children's court for offences or because they are believed to be 'neglected' may be placed under the supervision of a Child Welfare Officer or made Wards of the State.

Supervision: At 30 June 1982, there were 322 children under the legal supervision of Child Welfare Officers:—

Southern Region	—	134
Northern Region	—	84
North-West Region	—	104

Wards of the State: Once a child has become a Ward of the State, the Director of Social Welfare becomes his/her legal guardian to the exclusion of all others. Through the staff of the Department, and with the help of individuals and groups in the community, the Director may exercise this responsibility for guardianship in a variety of ways.

In many cases it is considered to be in the best interests of a child to provide care by supplementing, rather than substituting for the care offered by his natural parents. Where it is necessary to remove the child from his normal home, it often remains possible to assist both the child and parents in a way which leads towards the re-establishment of a normal, healthy parent/child relationship.

The following table lists the actual location of wards as at 30 June 1982. It should be noted that all the placements listed also provide care for children who are not wards.

**Children Under Guardianship of the Community Welfare Department
at 30 June 1982**

<i>Type of Placement</i>	<i>Number of Children</i>
Residential child care establishments	
Approved children's homes	56
Family group homes	27
Social welfare institutions	26
Total	109
Foster homes	241
Hospitals	6
Living with parent or relative	129
Other adult care	29
Living independently	20
Other placements	7
Unauthorised absences	8
Total Wards of State	549

Adoption: Under the *Adoption Act* 1968 the Department provides an adoption service and licenses the State's only private adoptive agency. In the year ended 30 June 1982 there were 119 adoption orders made. Of this total 56 were in respect of adoptors who were naturally related in some way to the child, and 63 were in respect of children who were not related to their adoptors.

Early Childhood Services: The Family and Children's Services Branch of the Department fulfils the legislative responsibilities involved in Part 6 of the *Child Welfare Act* 1960, that is the licensing and supervision of facilities where a fee is charged to provide substitute care for children younger than seven years. These responsibilities include assessment of applicants, maintenance of a support service to licensees, and the keeping of records of holders of current licences. In carrying out these duties, the over-riding aim is to encourage and develop a range of services to meet the needs of families who require substitute day care or short term overnight care for their children.

The following table shows the location and type of services for which licenses were current as at 30 June 1982:

Licensed Child Care Services, Type and Location at
30 June 1982, Tasmania

Type of Service	South	North	N-West	Total	Comparison with 30/6/81
Family day carers—					
In schemes	265	130	54	449	381
Outside schemes	63	38	45	146	112
Play centres—					
Number of facilities	9	16	18	43	45
Child care places	140	289	335	764	818
Child care centres—					
Number of facilities	25	6	6	37	34
Child care places	648	170	205	1 023	999
Total	1 150	649	663	2 462	2 389

Grants to Organisations

The Department has been given a limited responsibility in the area of individual welfare, e.g. the young unemployed, the handicapped and the aged. This role finds its expression in specific government endorsed programs, and the provision of grants to voluntary organisations and self-help groups. In providing grants to the non-government sector, the Department endeavours to ascertain that the aims of the applying agency are in accord with the overall objective of the Department.

The total allocations to grants programs in the year ended 30 June 1982 was as follows:

Sundry Social Services Grants	\$360 000
Women's Shelters	\$412 500
Handicapped Persons Services	\$395 000
Youth Services	\$ 95 000
Early Childhood Services	\$ 91 700
Neighbourhood Homes	\$ 80 000

In addition, the Department co-operated with the Federal Government in the administration of the Family Support Services Schemes and the Youth Services Schemes. As well, the Commonwealth sought the Department's advice on the distribution of its grant to emergency relief group agencies.

REPATRIATION SERVICES AND PENSIONS

General

The Department of Veterans' Affairs was originally established as the Repatriation Commission under Federal legislation in 1920. The Department is responsible for:

- (i) The payment of disability and service pensions to eligible veterans and their dependants;
- (ii) The provision of medical treatment to veterans for injuries and illnesses which have been determined to be related to service;
- (iii) The provision of medical treatment to widows and dependants of deceased veterans whose deaths are deemed to be service-related;
- (iv) The provision of medical treatment for disabilities, whether service-related or not, for veterans of the Boer War, the 1914-18 War, all ex-prisoners of war and for other veterans under certain circumstances.

The Department is also responsible for functions administered by the Defence Service Homes Corporation and the Office of Australian War Graves.

Repatriation benefits are provided for men and women who served in the Australian Forces in the 1914-18 War, the 1939-45 War, the Korea-Malaya Operations, the Far East Strategic Reserve, special service in special areas overseas including Vietnam, and service with the Defence Force on or after 7 December 1972. Benefits have recently been extended to members of certain Peacekeeping Forces. Benefits may also be provided for seamen in respect of Maritime Service during the 1939-45 War under the Seamen's War Pensions and Allowances Act.

Repatriation Pensions

Disability pensions are payable to veterans as compensation for incapacity accepted as service-related, and are not subject to an income test. Service pensions, in general, are payable to male veterans who have attained the age of sixty years and to female veterans who have attained the age of fifty-five years. They are subject to an income test and are broadly equivalent to age and invalid pensions.

Disability pensions may be granted to veterans whose incapacity has been accepted as related to service under the following provisions:

- (i) Resulted from an occurrence on service (applies to those veterans who saw active service);
- (ii) Arose out of or is attributable to service;
- (iii) Has been contributed to in any material degree, or has been aggravated by, the conditions of service.

Dependants' pensions may be granted to dependants of veterans whose death or incapacity has been accepted as service-related under these provisions.

Veterans who receive disability pensions are also eligible for free medical and hospital treatment for their service-related incapacity. With certain categories of pensioners, the eligibility for free treatment is widened to cover all disabilities. It is also possible for a veteran to qualify for free treatment for a disability without necessarily being granted a pension.

A service pension may be granted, subject to an income test in most cases, to the following:

- (i) A male veteran who served in a theatre of war, and has attained the age of sixty years or is permanently unemployable;

- (ii) A female veteran who served in a theatre of war, or served abroad, or embarked for service abroad, and has attained the age of fifty-five years or is permanently unemployable;
- (iii) The wife of a service pensioner who is not receiving a service pension as a female veteran.

In certain circumstances, service pensions may be granted to veterans of British Commonwealth and Allied countries, and the Australian, Commonwealth and Allied mariners of the 1939-45 War. The conditions governing the income test are similar to those for age pensions described earlier in this chapter.

Details of selected Repatriation benefit rates are shown in the following table:

Repatriation Benefits, Tasmania (a) (\$ Per Week)				
Benefit	Rate			
	At 14 May 1981	At 12 Nov. 1981	At 13 May 1982	At 11 Nov. 1982
<i>Payable Without Income Test</i>				
Disability pensions—				
Special rate (T.P.I.) pensions—				
Veteran	127.65	133.50	142.05	148.00
Wife	4.05	4.05	4.05	4.05
Each child	1.38	1.38	1.38	1.38
Intermediate rate pensions—				
Veteran	87.85	91.90	97.80	101.90
Wife	4.05	4.05	4.05	4.05
Each child	1.38	1.38	1.38	1.38
General rate pensions (maximum rates)—				
Veteran	48.15	50.35	53.55	55.80
Wife	4.05	4.05	4.05	4.05
Each child	1.38	1.38	1.38	1.38
War widows—				
Pension	66.65	69.70	74.15	77.25
Domestic allowance	12.00	12.00	12.00	12.00
Orphans' pensions—				
Father dead—				
Each child	13.80	15.00	15.00	16.60
Both parents dead—				
Each child	27.60	30.00	30.00	33.20
<i>Payable Subject to Income Test (Maximum Rates)</i>				
Service pensions—				
Veteran—Standard (single person)	66.65	69.70	74.15	77.25
Married	55.55	58.10	61.80	64.40
Addition for each child	10.00	10.00	10.00	10.00
Wife's pension (if she is not a pensioner)	55.55	58.10	61.80	64.40
Guardians' allowances—				
Where there is a child under six years or an invalid child requiring full-time care	8.00	8.00	8.00	8.00
Other cases	6.00	6.00	6.00	6.00

(a) Details relating to conditions of eligibility for the various pensions are available from the Department of Veterans' Affairs.

Disability Pension Payments

The following table shows, for Tasmania, the number of pensions in respect of veterans and their dependants, together with expenditure on disability pensions:

Disability Pensions, Tasman.			Pensioners and Payments		
Year	Number of pens. current at 30 June				Expenditure during year (a) (\$'000)
	Incapacitated veterans	Dependants of—		Total	
		Incapacitated veterans	Deceased veterans (b)		
1976-77	7 950	10 182	1 916	(c) 20 062	16 637
1977-78	7 734	9 169	1 941	18 844	18 676
1978-79	7 521	8 678	1 928	18 127	18 696
1979-80	7 349	8 400	1 753	17 502	19 389
1980-81	7 137	8 072	1 735	16 944	21 918
1981-82	7 040	7 890	1 751	16 681	22 965

(a) Includes widows' allowances.

(b) Includes war widows' pensions.

(c) Includes miscellaneous pensions not specified under the 'veteran' details, e.g. seamen's war pensions and allowances.

At 30 June 1982 the proportions of veterans in Tasmania receiving disability pensions were: in respect of service in the 1914-18 War, 3.1 per cent; the 1939-45 War, 88.7 per cent; the Korea and Malaya operations, 2.1 per cent, and other operations 6.1 per cent.

Service Pension Payments

The following table shows, for Tasmania, the number of service pensions in respect of veterans and their dependants, and expenditure on pension payments:

Service Pensions, Tasmania: Pensioners and Payments					
Year	Number of pensions current at 30 June				Expenditure during year (\$'000)
	Veterans	Dependants of—		Total	
		Living pensioners	Deceased pensioners		
1976-77	4 386	2 564	119	(a) 7 162	(a) 12 327
1977-78	4 945	3 094	62	(a) 8 101	(a) 15 722
1978-79	5 428	3 466	53	(a) 8 947	(a) 18 486
1979-80	5 962	3 867	51	9 880	21 831
1980-81	6 731	4 558	58	11 347	27 441
1981-82	7 191	4 874	8	12 073	32 529

(a) Includes British Commonwealth pensions.

Medical Services

To discharge these functions in Tasmania, the Department of Veterans' Affairs maintains a branch office, a general hospital and an artificial limb and appliance centre in Hobart. Facilities exist at the Repatriation General Hospital for medical treatment of hospitalised patients and specialist services for out-patients. Generally treatment for out-patients throughout the State is provided by doctors appointed by the Department as Local Medical Officers. People entitled to treatment can select a doctor from the panel of L.M.O.s and receive treatment at departmental expense. Payment for treatment in hospitals other than the Repatriation General Hospital is met by the Department only in certain circumstances.

Free treatment is available for all veterans of the Boer War, the 1914-18 War and for all ex-prisoners of war (this includes medical, hospital, dental, ophthalmological and para-medical treatment and, subject to a contribution of \$76.30 per week, treatment in nursing homes). Veterans who are suffering from malignant cancer are eligible for free medical and hospital treatment and to nursing home treatment subject to a contribution of \$62.65 per week. The facilities of the Repatriation Artificial Limb and Appliances Centres are available to provide free artificial limbs to both repatriation beneficiaries and the general public. The Vietnam Veterans' Counselling Service has been established to assist Vietnam veterans and their families with their health and social problems by direct counselling and referrals to government or other community agencies.

Soldiers' Children Education Scheme

Eligible Children

Educational assistance is granted to veterans' children in particular circumstances: (i) if the veteran's death has been accepted as service related or if he was in receipt of a disability pension for total and permanent incapacity or for specific disabilities at the time of death; (ii) if the parent, as a result of war service, is blinded or totally and permanently incapacitated.

Benefits

For children under 12 years, the scheme pays the cost of school requisites and fares. At secondary level, the weekly maximum payments for children living at home are: 12 years to 14 years \$6.05, 14 and under 16, \$8.40, 16 years up to 18 years, or to matriculation \$18.05. At tertiary level, those living at home may receive \$33.25 per week and those living away from home, \$59.45.

HEALTH SERVICES

Department of Health Services

Headquarters

Responsibilities of the headquarters of the Department of Health Service include:

- (i) public hospital management advisory services and the licensing of private hospitals and other medical establishments under the *Hospitals Act* 1918;
- (ii) District Medical Service;
- (iii) School Dental Service;
- (iv) Nurses' Registration Board and Dental Mechanics' Registration Board;
- (v) Tourist Nursing Service;
- (vi) legislation concerned with health and allied matters;
- (vii) certain specialist medical services;
- (viii) State Drug Advisory Committee;
- (ix) liaison with the health departments of other states and the Federal Government; and
- (x) liaison with professional, medical, dental and nursing associations.

The Director-General is the controlling authority under the Hospital Employees' Award, the Medical Officers' Award and the Nurses' (Public Hospitals) Award. Headquarters also controls and maintains Crown property occupied by the various sections of the Department and deals with the appointment and salaries of staff who are not officers of the Public Service.

General

The State Department of Health Services is responsible for the maintenance of the health of the community, the prevention of disease and the provision of government hospital and medical services. The Department is under the jurisdiction of the Minister for Health with the Director-General of Health Services as its permanent head.

**Department of Health Services, Tasmania: Expenditure from Consolidated Revenue
(\$'000)**

<i>Particulars</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Administration, head office	943	1 009	854	r 859	975
Hospital and medical services—					
Administration	676	636	578	554	577
Grants to hospitals	53 630	61 877	66 416	75 677	84 366
Medical services, country districts	471	441	510	483	465
Dental Health Service	2 348	2 627	2 798	2 950	3 330
Nurses' Registration Board	19	22	55	74	83
Interim Ambulance Authority	1 136	1 152	1 774	1 925	2 603
Government Analyst and Chemist	308	347	382	399	468
St John's Park Hospital	5 506	6 262	6 722	7 830	8 720
Public Health—					
Administration and inspectors	635	677	684	711	843
School Medical Service	405	506	570	637	690
Child Health Service	566	667	642	782	842
Community Health Services	1 104	1 724	1 950	2 120	2 472
Tuberculosis and cancer registry	567	118	90	109	115
Miscellaneous grants and expenses	1 260	2 003	2 520	r 3 117	3 042
Total	69 574	80 068	86 545	98 227	109 592

School Dental Health Service

This service, available free to children up to school leaving age, aims to examine and provide necessary treatment each year for every child, for whom parental consent is given.

At the end of June 1982, 41 static clinics had been established and there were 49 mobile dental units providing care in other schools. A consultant orthodontic service based in Hobart exists.

Dental Therapists: Tasmania became the first Australian state to develop a School of Dental Therapy in 1966. Students are trained (in a two year course) for service in Tasmania, on behalf of the Australian Capital Territory Health Commission and the Australian Development Assistance Bureau. Thirteen classes have graduated since June 1968 and the graduates have been appointed to clinics throughout the State. The School is located in Hobart and has residential hostel accommodation for up to thirty students.

Fluoridation

In 1953 Beaconsfield became the first local government authority to add fluoride to its water supply and Launceston followed in 1961. In 1964 Hobart became the first Australian capital city to add fluoride to its water supply.

A Royal Commission inquired into fluoridation of water supplies in 1968. It reported favourably and recommended its extension throughout the State. The State Government passed the *Fluoridation Act* 1968, setting up a Fluoridation Committee with power to recommend to the Minister for Health the fluoridation of any public water supply and to oversee fluoridation operations. It is required to report annually to the Minister who must lay the report before Parliament.

By June 1981, fluoridation had been extended to include: the whole of the greater Hobart area served by the Derwent and Southern Regional Water Supply Schemes, extending as far afield as Sorell, Campania, Kempton, New Norfolk and Snug; the City of Launceston and surrounding areas supplied by the West Tamar and North Esk Regional Water Supplies; and numerous towns supplied by individual schemes including Burnie, Devonport, Smithton, Waratah, Queenstown, Deloraine, Scottsdale, St Helens, Campbell Town, Oatlands, Strathgordon, Huonville, Ranelagh, Cygnet, Geeveston, Dover, Tullah, Zeehan, Savage River, Bridport and Ulverstone.

District Medical Service

In 1937 the Government undertook to help the more remote municipalities obtain medical services. Up until June 1975, participating municipalities levied a rate under the *Local Government Act* 1962, as amended, and met between one-half and one-third of the cost of the scheme. From July 1975, the Federal Government has contributed 50 per cent of the operating costs of the scheme by means of a Health Program Grant under the *Health Insurance Act*, the remaining 50 per cent being financed from State funds. The Commonwealth Government withdrew from the Scheme in September 1975.

The State Government has undertaken to continue to provide practitioners at the existing practices but the scheme is no longer free. All patients will be required to pay the scheduled fee except for pensioners and holders of Health Cards.

Established practitioners have been offered the choice of continuing in salaried practice, all revenue being returned to the Government, or taking over the practice as a private one. Replacement practitioners will only be installed on a private practice basis. In most instances, the Government will guarantee a gross level of income.

Community Health Services

There are seven community health centres in Tasmania situated at Clarence, Rokeby, Bridgewater, Kings Meadows, Ravenswood, Rosebery and Queenstown. Home nursing and home care services are available in all parts of the State, generally based upon the local hospital, and currently maintain some 6,000 patients in their own homes. These services work in close conjunction with Meals on Wheels, Red Cross Transport, and the majority of volunteer organisations who are involved in such services.

Pharmaceutical Services Section

The Pharmaceutical Services Section has numerous advisory, supervisory and regulatory functions under regulations and legislation relating to narcotics, poisons, and dangerous and therapeutic drugs.

Nursing

The registration of nurses and nursing education are within the jurisdiction of the Nurses' Registration Board which also regulates the practice of registered midwives and approves courses in nursing education and hospitals and institutions as schools of nursing.

There are five schools for general nursing, four midwifery, one child health, one psychiatric and one geriatric nursing. General Auxiliary nursing courses are conducted in two hospitals and Psychiatric Auxiliary nursing in one. Basic and post-basic courses in nursing of the Intellectually Handicapped are conducted alternatively. Registers are maintained for all the above categories of nursing.

Diploma of Applied Science (Nursing), Bachelor of Applied Science (Nursing Administration and Nursing Education) courses commenced at the Tasmanian College of Advanced Education, Newnham in 1982.

Division of Public Health

General

The Division of Public Health has responsibility for the preventive medical services of the State. The Director is responsible for the operation of the *Public Health Act* 1962 (as amended) and the control of Medical Officers of Health and other health officers employed by the Department of Health Services and municipalities throughout the State. A major responsibility is public immunisation programs, conducted through the municipalities; preparations distributed include the Sabin anti-poliomyelitis vaccine and the triple antigen vaccine (against whooping cough, tetanus and diphtheria). The Division is responsible for the Nutrition Advisory Service; industrial hygiene; environmental sanitation; pure food and pure drug quality control; and the public health aspects of the building regulations. Other major functions are discussed separately in the following sections.

Notifiable Diseases

Certain diseases are notifiable under the *Public Health Act 1962*, the aim being to prevent or check their spread. The following table shows the incidence of notifiable diseases in Tasmania for a six-year period:

Notifiable Diseases Reported to Department of Health Services, Tasmania
(Number of Cases)

Particulars	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Amoebiasis	—	—	—	—	2	—
Brucellosis	—	—	1	—	—	—
Gonorrhoea	140	160	197	181	183	189
Hydatids	4	1	—	1	1	3
Infectious hepatitis	284	244	170	122	41	29
Leptospirosis	4	—	1	—	—	1
Malaria	1	1	1	1	4	1
Ornithosis	—	—	—	1	—	—
Salmonella infections	21	49	36	22	32	30
Serum hepatitis	1	—	—	1	5	—
Shigella infections	1	1	—	1	—	2
Syphilis	1	1	4	2	2	—
Tetanus	—	2	—	—	—	—
Tuberculosis	44	22	28	26	16	30
Typhoid fever (incl. paratyphoid)	—	—	—	1	—	2
Total	501	481	438	359	286	287

Special conditions apply to venereal diseases. Persons suffering from them must not marry until cured, or engage in the manufacture or distribution of foodstuffs, and are liable to arrest and detention if they fail to continue treatment until cured.

Quarantine provisions and tuberculosis are dealt with in later sections.

Child Health Service

In 1981, there were 109 Child Health Centres and 12 travelling units. Triple Certified Child Health Sisters attached to these centres advise mothers on all aspects of caring for babies and young children. They advise mothers on infant feeding, child development and other health and social problems that occur in the family. The sisters visit new born babies at home and continue the supervision either at home, or, more commonly, in the Child Health Centre where individual records are maintained. Sisters also arrange for examinations to be carried out by family doctors under the Pre-School Medical Scheme. Departmental Medical Officers carry out the examinations in Child Health Centres. Voluntary Child Health Committees working for the centres raise money for furnishing and equipping new centres which are usually built by the Department. They also meet running costs such as heating, lighting, cleaning and telephones.

The Mothercraft Home: This home, located in Hobart, provides training for qualified nursing sisters who want to gain child health nursing certificates and for women who want to become mothercraft nurses. It accommodates children under six years old who need care or who cannot be looked after at home, and mothers learning to look after children or having feeding problems.

School Health Service

This is available free to children attending government and independent schools from kindergarten to matriculation level. Each school is visited annually by school medical officers who fully examine children at entry. Many children are also fully examined in their 11th and 15th years. In addition, children known to have defects are reviewed and special examinations are arranged for children whose physical health, behaviour or educational progress may be causing concern. Every year about 30,000 children are examined by school doctors. About 20 per cent are found to have some defect, and these are referred to family doctors, specialists and hospital clinics and other appropriate agencies for investigation.

School nursing sisters visit schools regularly to supervise the health and hygiene of pupils. They maintain medical records, perform cleanliness inspections, test sight and hearing, assist at medical examinations and follow-up cases in which defects are diagnosed. Where there has been no indication for concern about a child's health, the sister examines the child thoroughly in the 5th grade. If there is any concern the child is referred to the medical officer.

Sisters contribute to health education and research projects and may organise immunisation sessions at their schools.

Handicap Assessment Centres

Assessment Centres have been established in Hobart, Launceston and Burnie. The staff comprises medical officers, nursing sisters, psychologists, occupational therapists and welfare officers. Children referred to these Centres, because of a known handicap or suspected of having a handicap, are assessed using a team approach. Specialists in other areas, e.g. education, mental health and specialist clinics in hospitals are consulted and asked to contribute to case conferences.

Mental Health Services Commission

Introduction

Significant advances have been made in the field of clinical psychiatry and in the treatment of mental illness during the past three decades. The development of psychotropic drugs, new therapeutic techniques and improved methods of clinical practice have revolutionised the mental hospital from an institution for the incarceration of lunatics to a modern hospital geared to the care and rehabilitation of the sufferers of psychiatric disorders.

Administration

The Mental Health Services Commission was established under the *Mental Health Services Act* 1967, following an interdepartmental investigation into psychiatric services in Tasmania. The Commission comprises three members: a Medical Commissioner, a Clinical Commissioner and an Administrative Commissioner. Since 1 July 1968, the Commission has operated as a statutory authority, completely separate from the Department of Health Services.

The Mental Health Services Commission provides integrated community services and to this end has established acute psychiatric units at Launceston, Wynyard and Latrobe. These regional units are closely linked to the public hospital complexes.

In September 1972, the Commission took over the Tasmanian Chest Hospital at Creek Road, Hobart and re-named the institution the John Edis Hospital. The facilities at this hospital have enabled the services for alcoholism and psychiatric disorders, formerly carried out at Clare House, New Town, to be expanded.

The principal institution under the control of the Commission is the Royal Derwent Hospital.

Royal Derwent Hospital

The Royal Derwent Hospital (at New Norfolk) is the State's principal centre for the treatment of psychiatric disorders and for caring for the mentally retarded. The hospital is divided into sections and patients are allocated to the sections on the basis of their medical diagnosis. The basic division of patients is into those who are psychiatric patients and those who are suffering from mental sub-normality.

The following table shows the diagnosis of mental illness of patients in the Royal Derwent Hospital (incorporating Millbrook Rise):

Royal Derwent Hospital, Tasmania (a)
Diagnosis of Mental Disorder of Patients, 1981-82

<i>Mental Disorder</i>	<i>Patients admitted 1981-82</i>			<i>Patients at 30 June 1982</i>		
	<i>Males</i>	<i>Females</i>	<i>Total</i>	<i>Males</i>	<i>Females</i>	<i>Total</i>
Senile and pre-senile dementia	25	15	40	34	49	83
Alcoholic psychosis	9	—	9	45	16	61
Other organic psychotic conditions	5	2	7	4	1	5
Schizophrenia	69	41	110	79	50	129
Affective psychoses	27	25	52	8	17	25
Paranoid states	6	12	18	2	5	7
Other psychoses	3	11	14	—	—	—
Psychotic disorders	7	7	14	4	6	10
Personality disorders	26	18	44	1	3	4
Alcoholism	69	6	75	13	2	15
Drug dependency	7	1	8	—	—	—
Mental disorders not specified as psychotic associated with organic brain damage	5	1	6	5	2	7
Mental retardation—						
Mild	10	3	13	17	16	33
Moderate	16	15	31	91	55	146
Severe	5	5	10	45	71	116
Profound	—	—	—	20	19	39
Unspecified	4	—	4	—	—	—
Other	18	15	33	7	3	10
Total	311	177	488	375	315	690

(a) Includes Millbrook Rise Hospital.

The following table shows the numbers of patients admitted and discharged and deaths in the Royal Derwent Hospital (including Millbrook Rise):

Royal Derwent Hospital, Tasmania (a)
Number of Patients Admitted and Discharged, and Deaths, 1981-82

<i>Particulars</i>	<i>Males</i>	<i>Females</i>	<i>Total</i>
Patients at 30 June 1981	379	316	695
Patients admitted—			
First time	100	63	163
Re-admitted (including statistical re- admissions)	211	114	325
Total	690	493	1 183
Patients discharged, etc.—			
Discharged from hospital	220	129	349
Statistical discharges	70	28	98
Died	25	21	46
Total	315	178	493
Patients at 30 June 1982	375	315	690

(a) Includes Millbrook Rise Hospital.

NOTE: Statistical discharges are those patients who have not been officially discharged, but have been absent on leave from the hospital for more than 10 days. Should such persons require further hospitalisation, they are classified as 'Statistical re-admissions'.

Other Institutions

'Melrose' is the headquarters of the Commission and provides administrative and personnel and financial services to the various clinics and centres under its control, and liaison with the Government. The Director of Mental Retardation Services is also located at Commission headquarters.

Child and Adolescent Psychiatric Unit (New Town) is a centre for children and adolescents with disturbances of behaviour and/or emotions where help is offered to the children and adolescents, their parents and families. The centre also functions in a consultative capacity to allied professionals and organisations and fulfils a teaching role to both professionals and the community. During 1981-82 there were 3 335 patient contacts.

Community Services South provide a specialist referral system for general practitioners and other health workers in the care of those with mental illness or emotional and behavioural problems. Clients are dealt with on a community or out-patient basis, with referrals to hospital when necessary. Psychiatric assessment, medical treatment, counselling and psychotherapy, using a team approach, are available. A further aim of the service is to promote mental health through community education and liaison with other agencies. During 1981-82 there were 10 115 patient contacts.

Professional Psychiatric Unit (Royal Hobart Hospital) provides psychiatric assessment and treatment of a spectrum of ambulatory patients not requiring security facilities. A comprehensive range of treatment is available. There is co-operation with other clinics and agencies, and, as an academic unit, it reaches post-graduate and under-graduate medical staff.

Lindsay Miller Clinic is a general hospital psychiatric unit at Launceston General Hospital, providing comprehensive services to adults as out-patients, day-patients and in-patients. There are 16 acute beds and 12 hostel beds. A wide range of medical psychotherapeutic and social case-work methods of management are provided, with a psychiatric consultant service. Liaison and educational contacts are maintained with other community services. During 1981-82 there were 298 in-patients, 1 581 out-patients and 1 849 day-patients.

LANTADD (Launceston and Northern Tasmanian Alcohol and Drug Dependency Service) provides medical assessment and treatment, combined with individual counselling and group work to deal with alcohol and drug dependency problems and associated problems of living. Beds are provided at the Lindsay Miller Clinic for medical treatment of short duration, while detoxification is managed at the Launceston General Hospital. In 1981-82 there were 1 670 patient contacts.

Elonera Handicapped Children's Centre is a day centre providing stimulation and individual training programs for the mildly to profoundly intellectually handicapped. Parent support, early intervention and home based programs are offered. Children who are capable, are transferred through child guidance to kindergarten and/or special school. Attendances during 1981-82 totalled 2 444.

North East Community Team provides assessment and counselling for people with emotional problems, with emphasis on early intervention. This is done through individual casework, group work or community organisation. Clients are dealt with on a community basis with referral to hospital when necessary. A further aim of the service is to promote mental health services through community education and liaison with other agencies. Attendances for 1981-82 were 5 456.

John Edis Hospital (New Town). This 40 bed hospital provides in-patient, day-patient and out-patient treatment for persons with alcohol/drug dependency or acute psychiatric disorders through education programs, individual and group counselling and occupational therapy. Attendance figures for 1981-82 were: Admissions: in-patients 497; day-patients 241. Attendances: out-patients 6 531; patients' drop-in centre 1 666.

Quindalup Training Centre (New Town). In December 1981 the Commission took over respite care services previously operated by a voluntary organisation. Overnight care is provided to intellectually handicapped children up to 16 years of age for whom there

is no alternative community based respite service. The Centre also operates a limited day care service. From December 1981 to June 1982 there were 24 clients resulting in 456 overnight stays.

Forensic Service is concerned principally with persons referred by the Courts, Probation and Parole Services, or by the Prison authorities. A full psychiatric/psychological service is offered. Referrals during 1981-82 totalled 207.

Rocherlea Activity Training Centre. The Commission operates a respite care service at this Centre. The service is limited to the provision of respite care to intellectually handicapped persons of all ages and levels of disability. From December 1981 to June 1982 there were 34 clients resulting in 781 overnight stays.

Wellington Street Clinic offers help to children and adolescents with emotional and/or behavioural problems. Psychotherapy in a family context is used though other forms of treatment are available. Community work includes education, initiation of services and agency co-ordination. During 1981-82 there were 1 041 interviews.

Spencer Psychiatric Clinic (North-Western General Hospital) is a general hospital psychiatric unit with 17 in-patient beds and out-patient facilities. The unit is recognised as an Alcohol and Drug Dependency Treatment Centre and also provides psychiatric treatment for the whole range of psychiatric disorders. During 1981-82 there were 6 579 patient contacts.

Community Services North West (Devon Clinic and Devonport Psychiatric Clinic). This service provides a special referral system for general practitioners and other health workers in care of those with mental illness or emotional and behavioural problems. Clients are dealt with on a community or out-patient basis, with referral to hospital when necessary. Psychiatric assessment, medical treatment, counselling and psychotherapy, using a team approach, are available. A further aim of the service is to promote mental health through community education and liaison with other agencies. The facility also provides day centre care for patients selected by the psychiatric team. Attendance figures for 1981-82 were: in-patients 696; out-patients 3 025; day-patients 2 820.

State Controlled Hospitals

General

In Tasmania, medical establishments include hospitals, nursing homes, geriatric establishments, convalescent homes, orthopaedic units, etc. Some are privately administered while the State Government accepts the major financial responsibility for others; in the case of the latter group, control is either direct or exercised through hospital boards.

Institutions controlled by the State include four general hospitals, 14 district hospitals, eleven hospital annexes and district nursing centres with bed accommodation and six without, one mental hospital, two maternity hospitals and three nursing homes for the aged. (The Department of Health Services directly administers one nursing home for the aged.) These institutions could all legitimately be described as 'public'. However, in the tables in this section, the term 'public' is applied only to the general and district hospitals, the other types of institutions being specified separately.

General Hospitals (Public)

Hospitals providing all facilities and specialised treatment are the Royal Hobart, Launceston General, Mersey General (at Latrobe and Devonport) and North-Western General (with divisions at Burnie and Wynyard). The Queen Alexandra (Hobart), a division of the Royal Hobart Hospital, and the Queen Victoria (Launceston) are maternity hospitals.

Specialist treatment is available at general hospitals in obstetrics, gynaecology, orthopaedics, urogenital surgery, plastic and reconstructive surgery, neuro-surgery and neurology, radiology, pathology, radiotherapy, psychiatry and ophthalmology; skin diseases and venereal diseases are also treated and clinics operate in thoracic medicine and

surgery. An emergency obstetric service, with specialists based in Hobart and Launceston, provides a free service to the smaller public hospitals, district nursing hospitals and district medical officers outside the two cities.

The Douglas Parker Rehabilitation Centre provides physiotherapy, occupational therapy, speech therapy and other associated rehabilitation services to day patients and in-patients who are accommodated in hostel beds. It is administered through the Royal Hobart Hospital.

The Peacock Convalescent Hospital in Hobart is run by a committee of management, most of its patients being referred from the Royal Hobart Hospital.

Cost Sharing Agreement

As of 1 October 1976 the Tasmanian Government entered into an agreement with the Federal Government for the sharing of the approved net operating costs of recognised public hospitals. This Agreement will continue until 1985. Tasmania and South Australia are the only states which continue to fund public hospital services on the Cost Sharing Agreement. The Agreement was renegotiated to take into account the changes to the health insurance system which occurred on 1 September 1981.

Raising of Fees

In order to offset the increasing costs of running public hospital services and limited available funds there have been changes to fees schedules to enable a wider scope of in-patient and out-patient charges to be made. Charges for out-patient services were introduced on 4 April 1979.

- (i) *Standard Hospital Patient*: Charges are raised on these patients regardless of insurance status.
- (ii) *Intermediate Patient*: Patients accommodated at the Royal Hobart Hospital may elect to be treated by their own doctor who charges them on a fee for service basis. The hospital charges the patient an accommodation fee only and the medical practitioner pays the hospital a hospital service fee for the use of the hospital resources.
- (iii) *Private Patient*: A patient of the Queen Alexandra Hospital and Queen Victoria Hospital may elect to be treated as a private patient and be treated by a medical practitioner of her own choice. An accommodation charge is levied on these patients.
- (iv) *Compensatable*: The hospital may recover at a specified rate costs in respect of patients with entitlement under the *Worker's Compensation Act*, *Motor Accidents (Compensation and Liabilities) Act* 1912.
- (v) *Veterans' Affairs*: Defence forces charges are raised upon the Department of Veterans' Affairs or appropriate defence force for those persons with entitlement.
- (vi) *Persons Entitled to Free Treatment*: The majority of patients entitled to free public hospital treatment fall into one of the categories defined by the Commonwealth Department of Social Security. These are:
 - Holders of Pensioner Health Benefit Cards and their dependants.
 - Holders of Health Benefit Cards and their dependants.
 - Holders of Health Care Cards and their dependants. These persons include unemployed and other beneficiaries, persons who meet a low income test and immigrants or refugees for their first six months in Australia.

Computerised Information Systems

With the increased complexity and costs of running hospitals, and associated need for up to date information, the Department has been examining and implementing computer based information systems. The majority of payrolls are now processed on the resources of Health Computing Services of Victoria as part of a complete personnel payroll reporting system. Cost centre accounting systems are presently being implemented

and it is hoped that all hospitals will be ready to change to an accrual method of accounting for the 1983-84 financial year. A state-wide computer network to provide for patient billing, admission transfer system, creditors and debtors ledgers and patient master index will be operational shortly.

State Controlled Hospitals: Finances and Patients

The following tables give summaries of the financial operations and patient numbers of State controlled hospitals and hospitals for the aged:

State Controlled Hospitals and Hospitals for the Aged, Tasmania
Receipts and Payments (a), 1981-82
(\$'000)

Particulars	Hospitals (excluding mental)				Hospitals for the aged
	Public (b)	Maternity (c)	Total	Mental hospitals (d)	
Receipts—					
Government aid—					
State	41 661	1 502	43 163	12 466	4 135
Federal	40 860	1 501	42 361	142	4 135
In-patient fees	15 581	1 445	17 026	1 986	5 906
Out-patient fees	2 429	18	2 447	—	—
Other	6 082	253	6 335	188	2 825
Total	106 613	4 719	111 332	14 782	17 001
Payments—					
Salaries and wages	80 373	3 776	84 149	12 052	12 925
Provisions	2 522	109	2 631	(e)	1 292
Domestic supplies	2 578	129	2 707	(e)	306
Dispensary, etc.	7 368	156	7 524	(e)	162
Other	16 012	562	16 574	2 730	2 341
Total	108 853	4 732	113 585	14 782	17 026

(a) Excludes expenditure from State Loan Fund.

(b) Includes general and district hospitals; includes maternity wards in public hospitals.

(c) Excludes maternity wards in public hospitals.

(d) Refers to Royal Derwent Hospital incorporating Millbrook Rise.

(e) Not available on a comparable basis; included in 'Other'.

State Controlled Hospitals and Hospitals for the Aged, Tasmania
Accommodation and In-Patients

Particulars	Hospitals (excluding mental)		Mental Hospitals		Hospitals for the aged	
	1980-81	1981-82	1980-81	1981-82	1980-81	1981-82
Hospitals and homes	no. 22	21	1	1	4	4
Bed days	no. 463 301	495 597	260 767	251 350	250 791	250 300
Beds available	no. 2 223	2 062	880	880	820	825
In-patients—						
Total number treated	57 582	55 938	1 294	1 184	1 493	1 790
Daily average number of patients during year	1 419	1 358	714	689	687	686
In-patient costs—						
Total	\$'000 78 396	73 403	12 607	14 782	12 931	15 890
Daily average per patient	\$ 158.98	148.11	48.34	58.81	51.56	63.56

*Hospitals for the Aged and Invalid***Government Hospitals for the Aged, Tasmania, 1981-82**

Hospital	Other Accom- modation	Approved Nursing Home Beds					Percent Occupancy
		Beds Avail- able	Bed Days		Daily Average		
			Ordinary with Ext Care Benefit	Ordinary		Total	
Cosgrove Park (a)	136	144	22 459	27 618	50 077	137.20	95.3
St John's Park	20	548	75 900	80 795	156 695	429.30	78.3
Spencer Nursing Home (b)	—	66	17 619	2 281	19 900	54.52	96.7
Mersey Nursing Home	—	67	20 283	3 345	23 628	64.73	96.6
Total	156	825	136 261	114 039	250 300	685.75	84.1

(a) Cosgrove Park is administered as part of the Launceston General Hospital.

(b) This is a geriatric wing of the Wynyard Division of the North West General Hospital.

The State Government administers five hospitals caring for the aged and for invalids. In addition to those hospitals in the above table, the R.M.W. Webster Nursing Home at Campbell Town commenced operation in July 1982.

District Hospitals (Public)

These do not provide the diverse range of services available in the general hospitals, and do not have resident medical officers. They are located at Beaconsfield, Campbell Town, Currie, Franklin, Longford, New Norfolk, Ouse, Queenstown, Rosebery, St Helens, St Marys, Scottsdale, Smithton and Ulverstone.

Private Medical Establishments

There are 98 private medical establishments in Tasmania operated by charitable and church organisations and by private individuals or organisations. Most are concerned with care of the aged but five are hospitals with a more general purpose and one is a psychiatric hospital. Also, seven are used for the accommodation of physically and mentally handicapped persons. All 90 are registered under Part III of the *State Hospitals Act* but six are also registered under the *Federal National Health Act and Health Insurance Act* as hospitals. These are Calvary, St Johns, St Helen's and Hobart Clinic in Hobart, and St Lukes and St Vincent's in Launceston; all provide medical and surgical services except Hobart Clinic. Forty-three of the remaining establishments are licensed to provide nursing home care and 27 to provide accommodation for ambulant patients only.

The largest units in the non-hospital group are: Hobart Area, A.A. Lord Homes (111 beds), St Ann's Rest Home (126), Freemasons Home (126), Lillian Martin Home (126), Mary's Grange (91), Strathaven Lodge (117), Queen Victoria Home for the Aged (87); Launceston area, Nazareth House (103), Ainslie House (58); North-Western area, Meercroft Home for the Aged (96), Eliza Purton Home for the Aged (91).

Government Analyst's Laboratory

This laboratory analyses a wide variety of foods, drugs and other substances and undertakes work for Government departments and the public. Its work includes food and agricultural chemistry, forensic chemistry and toxicology, analysis for industrial hygiene purposes, water and corrosion problems, and other matters such as blood alcohol examinations for *Road Safety (Alcohol and Drugs) Act* purposes.

Other Health Matters*Child Health Institutions*

These are medical institutions run by the State or subsidised by public funds. They provide treatment and supervision along with general education. The Sight Saving School,

School for the Blind and Deaf, Talire (for retarded children) and Wingfield (for orthopaedic patients) are government institutions for children with particular defects.

Ambulance Services

Between 1977 and 1983 ambulance services in Tasmania were co-ordinated by the Interim Ambulance Authority, which is responsible to the Minister for their effective operation. Regional ambulance services are provided to the adjacent local government areas by four ambulance boards, based in Hobart, Launceston, Devonport and Burnie. A few municipalities operate independent services. The total Government grant to ambulance services, both under board and independent control, was \$2,694,000 in 1981-82. Ambulance services under control of the four boards provide free transport for ratepayers, occupiers and pensioners. In addition to receiving Government subsidies, their income is derived from fees, mostly raised against hospitals, the Motor Accidents Insurance Board, and workers' compensation insurance, and municipal grants based on the assessed annual value of a participating municipality.

From 1983 the administrative structure of ambulance services will be altered to provide for a unified service under the direction of a Director of Ambulance Services, who is subject to ministerial control. Ambulance services will continue to be organised on a regional basis. The four regional boards will be replaced by Ambulance Advisory Councils, and there will also be a single Statewide Ambulance Advisory Council. The funding basis of the ambulance service will also alter, with a considerable increase in the municipal contribution, to the level of 40% of the budgeted operating costs of the service, shared among participating municipalities on a population basis.

Royal Flying Doctor Service

This was established in Tasmania in 1960 and has as its purpose the provision of medical and dental services to persons in isolated areas. If the illness or injury is serious, a doctor flies to the patient and if necessary brings him back to hospital. The ambulance services receive the calls, make arrangements to charter aircraft and supply medical equipment. The Federal and State Governments make an annual grant towards operational expenses.

Blood Transfusion Service

Prior to 1954, the Australian Red Cross Society, which operates the service, was assisted only by the State Government; now a grant equal to 35 per cent of operating expenses is made by the Federal Government and a grant equal to 60 per cent of operating expenses by the State. The combined grant in 1981-82 was \$461 848.

Alcohol and Drug Dependency Board

This Board was established under the *Alcohol and Drug Dependency Act* 1969; its members are appointed by the Minister for Health from the medical, pharmaceutical, social service, police and legal professions. Its functions are: (i) to keep under review all matters relating to the prevention and treatment of alcohol and drug dependency; (ii) to advise on the declaration and control of substances as drugs under the Act; and (iii) to act as a board of appeal for applications by patients for discharge from treatment centres.

The treatment and rehabilitation of sufferers of alcohol and drug dependency are handled by the Mental Health Services Commission, the Commission's acute psychiatric units (at Wynyard, Devonport and Launceston), the Royal Derwent Hospital at New Norfolk, the Royal Hobart Hospital and the John Edis Hospital at New Town have been declared treatment centres.

Municipal Health Functions

Municipal councils and city corporations possess wide powers and responsibilities in public health. They organise triple antigen immunisation campaigns against diphtheria, whooping cough and tetanus, and vaccinations against poliomyelitis, smallpox, rubella and

measles. (These are available without charge to children under 17 years.) They control the condemnation of sub-standard dwellings, the disposal of sewage, the provision of garbage and night soil services and the reticulation of water. A medical officer of health, often appointed by two councils, is responsible, among other things, for: inquiring into the causes, origins and distribution of diseases; investigating influences affecting the public health of the district; directing and supervising the municipal health inspectors in the execution of the *Public Health Act*; inspection of local certificates of notification of infectious disease and direction of control of such disease; reporting the existence of any nuisance; inspection of any animal carcass for sale for human consumption; and inspecting any premises where milk or milk products are produced or stored.

Commonwealth Department of Health

General

The Department is concerned in Tasmania with the administration of the *Quarantine Act 1908*, the *National Health Act 1953*, the *Health Insurance Act 1973* and the *Nursing Homes Assistance Act 1974* and the control and maintenance of Pathology and National Acoustic Laboratories at Hobart and Launceston.

Quarantine

Quarantine guards against the importation from overseas of human, animal and plant infection. By arrangement, plant and animal quarantine is operated by the State Department of Agriculture. In general, interstate movements of animals and plants are left to the states, unless Commonwealth action is necessary for the protection of a state.

Health Program Grants

These grants, under the *Health Insurance Act*, are generally paid to organisations providing services through medical and para-medical personnel remunerated on a salaried or sessional basis. An approved organisation is entitled to be paid an amount equal to the cost incurred by the organisation in providing the approved health service, including such part of the management expenses of the organisation as the Minister considers attributable to the provision of the health service.

Domiciliary Nursing Care Benefit

This benefit of \$42.00 per fortnight is designed to help meet the cost of home nursing and other professional care for people who are chronically ill but being cared for in their own homes. It is payable to any person who provides continuous care for a patient in a private home provided the home is the usual residence of both the person and the patient and provided the patient meets certain medical criteria. The main eligibility rules are: (i) patients must be 16 years of age or more; (ii) patients must have an official certificate from their doctor stating that because of infirmity or illness, disease, incapacity or disability they have a continuing need for nursing care by a registered nurse; and (iii) patients must be receiving care by a registered nurse on an approved basis.

Nursing Home Benefits

The *Nursing Homes Assistance Act* came into effect from 1 January 1975. Under this Act, religious and charitable nursing homes can elect to come under the provisions of that legislation which relate to 'deficit financing' of such nursing homes. These nursing homes submit a budget showing estimated operating receipts and payments and the estimated end of year deficit. The Commonwealth Government provides monthly advances against the anticipated deficit and a final settlement based on the actual deficit revealed in the audited end of year accounts. The Act prescribes a fee to be charged to patients (\$76.30 per week with effect from 4 November 1982) and this may be varied by legislation. Arrangements exist for waiver or part-waiver of the prescribed fee in certain circumstances.

Those religious and charitable nursing homes which have not elected to come under provisions of the *Nursing Homes Assistance Act*, together with private gain nursing homes and government nursing homes, continue under the provisions of the *National Health Act*.

The benefits and patient contribution to fees in these nursing homes are given in the following table:

**Nursing Home Benefit Rates (National Health Act), Tasmania
(S Per Week)**

<i>Particulars</i>	<i>Ordinary care patients</i>	<i>Intensive care patients</i>
Basic benefit from 4 November 1982 (a)	177.45	219.45
Patient's share of fees from 4 November 1982	76.30	76.30
Total fee (b)	253.75	295.75

(a) Payable by Commonwealth Government irrespective of whether the patient has private health insurance or not from 1 September 1981.

(b) 'Total fees' are the standard fees as determined by the Government at 4 November 1982. If fees actually charged are: (i) less than the standard fee, the basic benefit, shown above, is reduced by the difference; or (ii) greater than the standard fee, the patient's share, shown above, is increased by the difference.

Private gain nursing homes and those religious and charitable nursing homes, which have not elected to come under the provisions of the *Nursing Homes Assistance Act*, accept a fee control system and require departmental approval to vary their prescribed fees. The prescribed fees may differ between nursing homes because of the 'base' figure accepted for each nursing home when fees control was introduced on 1 January 1973 and because of continuing different costs between such homes. An independent fees review committee exists in each state to determine any appeals made by nursing homes against departmental decisions on fees.

Pharmaceutical Benefits

The Pharmaceutical Benefits Scheme, under the provisions of the *National Health Act*, provides a comprehensive range of drugs and medicinal preparations which may be prescribed by registered medical practitioners for persons receiving medical treatment in Australia. Under this scheme, basic rate pensioners receive their pharmaceutical requirements free of charge; non-pensioner patients are required to pay a patient contribution fee of \$4.00 (reviewable) for each benefit item received. Concessional beneficiaries are required to pay a patient contribution fee of \$2.00 (reviewable) for each benefit item received. National Health prescriptions are valid for six months from the date they are written.

Pathology Laboratories

These laboratories, situated in Hobart and Launceston, provide diagnostic services for medical practitioners and hospitals. A general clinical pathology service is offered, and the laboratories also perform serological services for the Red Cross Blood Transfusion Centre.

National Acoustic Laboratory

In Tasmania the National Acoustic Laboratory has centres in Hobart and Launceston. There are also regular visits to larger country centres. Hearing centre services involve evaluation and definition of an individual's auditory capacity (audiological assessment) and the improvement of the individual's auditory function through the fitting of an appropriate hearing aid together with supplementary rehabilitative measures (audiological rehabilitation).

National Acoustic Laboratory services are free to people under 21 years of age, aged and invalid pensioners and their dependants, Repatriation and Service pensioners and War Widows, Social Security rehabilitees and Armed Services personnel. Referral, except in the case of children, must be by an appropriate medical practitioner.

Three main types of 'Calaid' hearing aids are provided by the Laboratory: in-the-ear, behind-the-ear and body aids. Each type is made in a number of ranges of power to suit

differing degrees of deafness, and each has been designed to allow ready acoustic and electronic modification of performance characteristics. This enables selective fitting for virtually every type of hearing loss, using a selection procedure developed by the Laboratory. In addition to Calaids a limited number of imported spectacle aids are utilised in those few cases where the particular acoustic qualities of these aids is required.

Isolated Patients Travel and Accommodation Assistance Scheme

This scheme, which was introduced on 1 October 1978, operates under the *National Health Act* and in general provides financial assistance to patients, and escorts or attendants where necessary, who need to travel more than 200 kilometres from their home to obtain specialist medical treatment or services. Benefits include the refund of travel costs less \$20.00 per claim and an accommodation allowance of up to a maximum of \$20.00 a night per person for overnight stays due to transport limitations and/or medical considerations.

HEALTH INSURANCE

Up until 30 June 1975, health insurance in Australia was available only through registered private health insurance funds which provided various medical and hospital benefits schemes. Benefits paid to insured members of funds comprised a fund benefit, together with a Federal Government benefit. The Federal Government also provided benefits to pensioners and certain persons in needy circumstances (e.g. unemployed persons).

Health Insurance Since 1975

Medibank

On 1 July 1975 Medibank came into operation. This scheme covered all Australians and provided the following benefits:

- (i) *Medical and Optometrical Services*: For these services Medibank paid 85 per cent of the schedule fee, maximum patient contribution was \$5.00. If the doctor chose to 'bulk bill' the patient would pay nothing. Doctors were expected to 'bulk bill' for pensioners.
- (ii) *Hospital Benefits*: Standard ward accommodation and treatment by hospital doctors was provided free. The government made a contribution to the costs of intermediate and private ward accommodation.
- (iii) *Private insurance* was available for: those wanting a choice of doctor and intermediate or private accommodation in hospital; to pay the 'gap' between the medibank refund and the schedule fee; and to cover ancillary services such as dental, optical appliances and physiotherapy.

On 1 October 1976 the original Medibank scheme was modified. All people apart from pensioners and low income earners had the choice of either paying a 2.5% tax levy or contributing to a private registered health fund which provided benefits at least equivalent to the basic Medibank standard.

This scheme was again modified on 1 September 1979 as follows:

- (i) *Medical and Optometrical Services*: All patients other than pensioners and disadvantaged people were required to pay the first \$20.00 of any service, the Commonwealth paid the balance over \$20.00. Insurance was available to cover this \$20.00 if desired. Pensioners continued to receive benefits as under the original Medibank scheme. For low income earners the medical practitioner could 'bulk bill' and receive 75 per cent of schedule fee as full payment for the service.
- (ii) *Hospital Benefits*: Standard ward accommodation and treatment by hospital doctor continued to be provided free of charge as did the government contribution to the costs of intermediate and private ward accommodation.

- (iii) Private health insurance with registered companies provided basic coverage for 75 per cent of the schedule fee, with maximum patient payment of \$10.00. Hospital and ancillary coverage continued on the same basis as before.
- (iv) *Long Stay Hospital Patients*: A new concept was introduced to cover patients who were hospitalised for a continuous period exceeding 60 days. Where the stay was not for a specific period to allow treatment for an acute condition or for active rehabilitation, the patient was expected to make a contribution to the costs of hospitalisation. This contribution was not recoverable through insurance. This classification came into operation in Tasmania on 1 July 1980.

Changes to Health Insurance from 1 September 1981

The following arrangements have applied since 1 September 1981:

All patients other than Pensioner Health Benefit Card-holders, Health Benefit Card-holders (Sickness Beneficiaries) and Health Care Card-holders (for people in special need) are required to meet any medical and/or hospital costs incurred. This can be done either by taking out insurance with a registered health benefit organisation or from their own pockets. A taxation rebate of 32 cents in the dollar has been introduced for contributions paid to a registered health benefits organisation to the extent of contributions paid for cover at the basic medical and/or hospital table levels.

Medical Benefits

Registered health benefit organisations offer a basic medical benefits table which provides coverage for 85 per cent of the schedule fee with a maximum payment by the patient of \$10.00 for any one service where the doctor charges the schedule fee. Organisations also offer supplementary and ancillary benefits. Commonwealth medical benefit at the rate of 30 per cent of the schedule fee for each service listed in the medical benefits schedule is paid by the registered benefit organisation and forms part of the benefits received towards the cost of medical services.

Hospital Benefits

Registered health benefit organisations also provide a basic hospital benefits table covering accommodation in shared rooms of public hospitals (current charge \$110.00 per day) with doctor of choice (currently available at Royal Hobart Hospital and both Queen Alexandra and Queen Victoria Maternity Hospitals) or with doctors engaged by the Hospital. In this latter case the professional service fee of \$60.00 per day is also covered by the basic table. All public hospitals raise accounts for out-patient services and these fees are also covered. The organisations also offer supplementary benefits which provide additional benefit for private hospital accommodation.

Pensioner Health Benefit Card-holders

Health Benefit Card-holders

Health Care Card-holders

Persons who hold one of the above-named cards which are issued by the Department of Social Security do not have to pay for public hospital accommodation and treatment nor for medical services where their doctor bulk-bills. If their doctor does not bulk-bill the person should register with one of the registered health benefit organisations (this is free) and the accounts then attract a Commonwealth Benefit of 85 per cent of the schedule fee with a maximum payment by the patient of \$5.00 for any one service where the schedule fee has been charged.

Those covered are:

- (i) pensioners and sickness beneficiaries with Pensioner Health Benefit cards (and their dependants);
- (ii) migrants and refugees who have been authorised by means of an entry permit in their travel document to remain indefinitely in Australia (and their dependants), during their first six months here;

- (iii) people receiving unemployment or special benefits who meet the Pensioner Health Benefits income test (and their dependants); and
- (iv) people on specified low incomes, for example:
 - married couples with an income of less than \$184.00 a week, plus \$20.00 for each child;
 - single parents with one child with an income of less than \$184.00 a week, plus \$20.00 for each additional child;
 - single people with an income of less than \$111.00 a week.

Other Services

The arrangements outlined above for medical benefits also apply to consultations with optometrists, certain specialised oral surgery carried out in hospital operating theatres and to orthodontic and related treatment for young people suffering from cleft lip and palate conditions where such services are covered by the Government medical benefit schedules.

Long Stay Hospital Patients

To classify as a 'nursing-home type patient' patients must have been hospitalised for a continuous period exceeding 60 days unless a medical practitioner certifies that the patient is, and will continue to be for a specified period, in need of acute care, professional attention for an acute phase of the patient's condition, active rehabilitation or continued management, for medical reasons, as an in-patient. 'Nursing-home type patients' will be required to make a specified 'patient contribution' towards the cost of their hospitalisation and will not be able to cover that contribution through insurance.

Further References

ABS Publications

Mental Health Statistics, Tasmania (4302.6), annual.
Year Book Australia (1301.0), annual.

Other Publications

DEPARTMENT OF HEALTH (Federal). *Annual Report of the Director-General of Health*. (Australian Government Publishing Service, Canberra.)
DEPARTMENT OF HEALTH SERVICES. *Report for the Year*. (Government Printer, Hobart.)
DEPARTMENT OF SOCIAL SECURITY. *Annual Report*. (AGPS, Canberra.)
DEPARTMENT OF SOCIAL WELFARE. *Report for the Year*. (Government Printer, Hobart.)

CHAPTER 9

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Chapter 9

LAW, ORDER AND PUBLIC SAFETY

LAW IN TASMANIA

Following British colonisation of Van Diemen's Land from 1803, a system of law and courts based on the Imperial system was established in the colony. A description of the origin and evolution of Tasmanian law is included in the 1976 and earlier editions of the *Year Book*. This section describes the present system of law operating in the State.

The Criminal Law of Tasmania

In 1924 the *Criminal Code Act*, which codified and brought together the criminal law of Tasmania, was passed. This Act embodied the State's criminal law in the form of a code which was made a schedule to the 1924 legislation.

As a result of a review of the State's criminal law, the *Criminal Code Act* 1973 was passed by Parliament. This statute embodied many important amendments to the Criminal Code resulting from recommendations made by the Law Reform Committee of Tasmania. (For details see the 1982 and earlier editions of the *Year Book*.)

During 1982 Parliament enacted the *Prisoners (Interstate Transfer) Act* which provides for the transfer interstate of prisoners to serve prison sentences in their home state.

Juries

Tasmanian legislation regulating juries seems to have been first passed in 1830 although, for many years before that date, the introduction of the British system of trial by jury in civil and criminal cases had been persistently urged in the colony. The *Hobart Town Gazette* shows that juries had been employed in the colony for the trial of criminal cases from the establishment of the Supreme Court in 1824. Juries remain as the tribunal for trying indictable criminal cases and there is limited right to a jury in civil actions, although in 1935 they were abolished for the purpose of trying motor accident cases.

Although the Tasmanian jury system was based on the English system it has, since 1934, embodied the principle of allowing *majority* decisions in certain circumstances instead of requiring the *unanimous* decisions once characteristic of jury usage in England and most other countries.

Civil cases have a seven-member jury and, if after three hours deliberation a seven-nil decision cannot be reached, a five-two decision is accepted. If the minimum five-two decision cannot be reached after four hours, the jury may be discharged.

In criminal cases, similar principles apply except that a 10-2 decision is accepted in lieu of 12-nil after stipulated periods of deliberation. In the case of murder, 12-nil is necessary to convict, but 10-2 can bring in a verdict of not guilty, or not guilty of murder but guilty of a lesser crime.

The Present Law Court System

The collection of court statistics is being converted to a new methodology. Statistics for 1982 will be available for the 1984 edition of the *Year Book*. For statistics for 1980 and earlier see the 1982 and earlier editions of the *Year Book*.

Courts of Petty Sessions

For particular municipalities in the State, there is a Court of Petty Sessions. The Court is constituted by a magistrate (who must have been a legal practitioner or barrister for not less than five years) or by two or more lay justices. In major centres of population, a Court sits regularly and, in smaller centres, a Court sits less frequently or is convened as occasion requires.

A Court of Petty Sessions has jurisdiction over all summary offences and also over certain indictable offences at the option of the defendant. Under the *Justices Act 1959*, a defendant may choose summary trial in the Court of Petty Sessions when charged with the following crimes: (i) Escape or rescue; facilitating escape of a prisoner or harbouring an offender; assisting escape of a criminal lunatic; rescuing goods legally seized; making a false declaration (or statement). (ii) Stealing; killing an animal with intent to steal; unlawfully branding an animal; obtaining goods by false pretence; cheating; fraud in respect of payment for work; receiving stolen property. (In all these cases the value of the property concerned must exceed \$100 but not \$1 000. If the value does not exceed \$100 the defendant will be tried summarily. If it exceeds \$1 000 he will be committed for trial in the Supreme Court.) (iii) Breaking a building other than a dwelling-house. (It is necessary for the defendant to be committed to the Supreme Court for trial where it is alleged that in the commission of the offence: property to the value of more than \$1 000 has been stolen; violence has been used or offered to any person in or about the building; the person had in his possession a gun, pistol, dagger, cosh, or other offensive weapon; explosives were used; or the defendant intended to commit a crime other than stealing.) (iv) Forgery; uttering. (The complaint must be for an offence in respect of a cheque for not more than \$1 000.)

Courts of Request

These are constituted as courts with civil jurisdiction for particular municipalities in accordance with the authority given by the *Local Courts Act 1896*. Courts are held before a commissioner who is usually a magistrate. The Attorney-General fixes the dates on which these courts sit. Every Court has jurisdiction throughout the State but a plaintiff may have his action struck out if he brings it in a Court other than the Court having jurisdiction, i.e. the Court nearest to which the cause of action arose. In such circumstances the plaintiff may lose costs.

The jurisdiction of a Court of Requests, which is a court of record, covers all personal actions where the debt or damage claimed does not exceed the maximum amount fixed under the Act. Since 1 November 1966, the sum of \$1 500 has been fixed as the maximum jurisdiction for a Court of Requests in respect of a debt or liquidated sum, and \$1 000 in any other case.

The Commissioner alone determines all questions of fact as well as of law and his decision is the judgment of the Court, unless a jury is required. In any action either party may require a jury as of right and there is power for the Commissioner to order that an action be tried by a jury, even though neither party has required it. Law and equity are administered concurrently in the Court and the general principles or practice in the Supreme Court are adopted and applied in cases not expressly provided for in the Act or Rules.

Courts of General Sessions

Courts of General Sessions, constituted under the *Local Courts Act 1896*, have been progressively discontinued since 1978 in conjunction with the transfer of local government courts to State administration which was completed in August 1980.

The Supreme Court of Tasmania

The Supreme Court of Tasmania is constituted by the Chief Justice and five Puisne Judges. Regular sittings of the Court are held at Hobart, Launceston and Burnie, although the Court is empowered, subject to the provisions of the *Supreme Court Civil Procedure*

Act 1932, to sit and act at any time and at any place for the exercise of any part of the jurisdiction and business of the Court.

The Court has jurisdiction over all causes, both civil and criminal, except those reserved for the High Court of Australia under the Australian Constitution. It also exercises Federal jurisdiction in matters such as bankruptcy, etc. Its civil jurisdiction extends to all causes of action, whatever the amount involved may be, and its criminal jurisdiction includes the trial of all indictable offences. In civil cases, the Court has power to call in the aid of one or more assessors specially qualified to assist in the trial of the actions, but it is not bound by the opinion or advice of any such assessor.

There is a right of appeal to the Supreme Court of Tasmania from all inferior courts and from many statutory tribunals.

Law and equity are administered concurrently in the Court which is enjoined to grant, either absolutely or on such terms and conditions as seem just, all such remedies to which any of the parties may be entitled so that, as far as possible, all matters in controversy between the parties may be completely and finally determined, and a multiplicity of legal proceedings avoided. The judges, on the recommendation of the Rule Committee, are empowered to make rules regulating the practice and procedure of all proceedings in the Court.

The jurisdiction of the Court is usually exercised by a judge of the Court and from his decision there is a right of appeal to the Full Court of the Supreme Court of Tasmania. A Full Court consists of three or more Judges of the Court. The Full Court is also a Court of Criminal Appeal under the Criminal Code. The latter is a Court to which appeals may be brought by the Crown or by an accused person where an indictable offence is involved. In some cases, there is an appeal as of right but, in other cases, leave is required.

The High Court of Australia

This Court was created by the Constitution of the Commonwealth of Australia and it has both original and appellate jurisdiction. It is constituted by the Chief Justice of Australia and six other Justices.

Except in relation to an appeal that relates to the amount of any damages in respect of death or personal injury, there is a right of appeal to the High Court from a final judgment of a Full Court of the Supreme Court of the State in any civil matter where the sum involved amounts to at least \$20 000. In other cases (including criminal cases) there is an appeal to the High Court if special leave is granted.

Sittings of the High Court of Australia are held in Canberra. Provision is made, when there is sufficient business to warrant convening a sitting of the Court in Hobart, for the Court to travel to Hobart for the sittings.

The Federal Court of Australia

The Court created by the *Federal Court of Australia Act 1976*, is constituted by the Chief Judge and 23 other judges. The Court was created basically to reduce the work of the High Court, so that the High Court could give greater attention to its primary function as the interpreter of the Constitution. Consequently, the Federal Court was invested with original and appellate jurisdiction under a variety of statutes including the *Conciliation and Arbitration Act 1904*, the *Bankruptcy Act 1966*, the *Trade Practices Act 1974* and the *Administrative Appeals Tribunal Act 1975*. Sittings of the Court are held in each capital city—there is a District Registry in each.

Tribunals

There are many tribunals which are not true courts and the powers and functions of these depend upon the detailed provisions of the particular statute under which they operate. Certain specialised courts have been created by statute. For example, the Wardens' Court is constituted under the *Mining Act 1929*.

Coroners' Courts

Coroners are appointed by the Governor and have jurisdiction throughout the State. Under the *Coroners Act* 1957, a coroner may hold an inquest: (i) concerning the manner of death of any person who has died a violent or unnatural death, who died suddenly without the cause being known, or from 'sudden infant death syndrome' or 'cot death', or who died in a prison, or mental institution; at the direction of the Attorney-General, he may also be required to hold an inquest concerning any death; (ii) concerning the cause of any fire if the Attorney-General has directed, or has approved a request by the owner or insurer of the property; or at the request of the State Fire Authority or the Rural Fires Board.

The coroner usually acts alone in holding an inquest, but either the Attorney-General or the relatives of the deceased may request that a four or six-man jury be empanelled. After considering a post-mortem report the coroner may dispense with an inquest, unless the circumstances of death make an inquest mandatory under the Act.

The duty of the Court is to determine who the deceased was, and the circumstances by which he came to his death. Medical practitioners and other persons may be summoned to give evidence. In the case of the death of an infant in a nursing home, the coroner may also inquire generally into the conditions and running of the institution. On the evidence submitted at the inquest, the coroner can order a person to be committed to the Supreme Court and can grant bail. In the case of murder, a coroner can issue a warrant for apprehension.

Children's Courts

A 'child' in this jurisdiction is one under the age of 17 years. The Court before finally disposing of the case, must receive a report from a child welfare officer (the representative of the Director for Community Welfare), unless the Court considers the offence trivial or the Director decides not to provide one. A child's parent has the right to be heard and to examine and cross-examine witnesses, or to be represented by counsel; also a parent can be compelled to attend the hearing if this imposes no unreasonable inconvenience.

In summary proceedings, the Court is compelled not to enter a conviction against a child unless it imposes a sentence of imprisonment or there are special circumstances which indicate that a conviction should be recorded.

Children under 16 years cannot be sentenced to imprisonment and children of 16 years cannot be sentenced for more than two years, in aggregate. Minimum penalties imposed by statute do not apply to children; for those under 14 years the maximum fine is \$20, and for those over 14 years, \$100. The Court may impose a supervision order to bring the child under the guidance of a child welfare officer or, if over 15 years, of a probation officer. Alternatively, the Court may declare the child a ward of the State, placing him under the control of the Director for Community Welfare until his eighteenth birthday, unless released sooner; it may also direct that a ward be committed to an institution. In cases where further investigation appears necessary the Court may issue a remand for an observation order before it makes a final decision. Remands for observation orders are for short periods and usually provide for intensive supervision. (In the case of delinquency the maximum period for such an order is three months.)

Neglected or uncontrolled children are in the Court's jurisdiction; it may make a supervision order; an interim order (similar to a remand for observation order, the effect being to defer the transfer of guardianship until it is apparent that there is no suitable alternative); or impose wardship or bind the parents over to provide proper care and control, and comply with other directions. If parents have contributed to a child's offence by failing to control the child they may also be charged, convicted, fined, ordered to pay for damage and obliged to enter into a recognizance for the good behaviour of the child for up to 12 months.

Unlike a Children's Court the Supreme Court is in no way inhibited in imposing a penalty on a child. In addition to its ordinary sentencing powers, it may make supervision or wardship orders, and commit a child to an institution. If a child is sentenced to im-

prisonment, the responsible Minister may direct that the sentence be served in a place other than a gaol.

Statistics showing numbers of children appearing before Children's Courts by age, sex and alleged offence are given in the next two tables:

Children Appearing Before Children's Courts, Tasmania(a), 1980-81
Classified by Age and Sex

Sex	Age (b) (in years)						Total (c)
	Under 7	7-8	9-10	11-12	13-14	15-16	
Boys	17	6	30	92	360	1 039	1 544
Girls	11	2	1	22	89	278	403
Total	28	8	31	114	449	1 317	1 947

(a) A child appearing twice or more before the Courts will appear twice or more in the table.

(b) Ages are at time of court hearing, not at time of offence.

(c) Includes 61 children (55 boys and 6 girls) who were 17 years old when appearing before the Courts but 16 at the time the alleged offences were committed.

Children Appearing Before Children's Courts, Tasmania(a)
Classified by Offence

Offence alleged	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Relatively serious offences—						
Damage to property	153	167	160	106	77	98
Breaking, entering and stealing	354	325	436	300	349	257
Stealing	586	616	619	391	455	428
Receiving	21	26	18	19	20	20
Illegal use of vehicles	224	292	207	131	91	91
Offences involving fraud	10	5	2	1	6	2
Sex offences	30	15	17	14	6	2
Other offences against the person ..	60	52	97	28	49	40
Offences against decency	15	10	18	14	4	45
Total	1 453	1 508	1 574	1 003	1 057	983
Other offences—						
Disorderly conduct	77	81	46	117	7	3
Traffic offences	710	634	508	498	364	358
Breaches of—Licensing laws	509	474	439	362	217	384
By-Laws	11	2	5	6	107	—
Firearms offences	28	9	29	33	19	22
Gaming	31	8	2	11	1	5
Trespass	49	27	14	13	15	26
Other	157	95	81	9	15	91
Total	1 572	1 330	1 124	1 049	745	889
Complaints under Child Welfare Act—						
Appearing as—Uncontrolled	53	32	20	12	26	—
Neglected	90	100	176	57	67	72
Breaches of supervision	9	8	8	13	14	3
Total	152	140	204	82	107	75
Total, of all offences	3 177	2 978	2 902	2 134	1 909	1 947

(a) A child appearing twice or more before the courts will appear twice or more in the table.

In the preceding table, the figures relate to actual prosecutions. Where a report concerned multiple offences, the apparently more serious one has been listed. However, a child may be included more than once if more than one report has been made.

The following table shows the orders made by the courts as a result of these offences:

Orders Made By Courts as a Result of the Offence (a)

Outcome	Boys	Girls	Total
Admonished and discharged	522	224	746
Conviction recorded	40	8	48
Declared ward	15	3	18
Declared ward and committed to institution	10	—	10
Fine	350	48	398
Good behaviour bond	35	15	50
Motor vehicle licence disqualification	34	1	35
Probation	48	21	69
Sentenced to imprisonment	4	1	5
Supervision C.W. Act	248	19	267
Unresolved at date of counting	42	5	47
Work orders	14	3	17
Other	145	17	162
Total	1 507	365	1 872

(a) Excludes complaints under the Child Welfare Act.

Bankruptcy

The *Bankruptcy Act* 1966, an Act of the Federal Parliament, gives effect to two main principles of bankruptcy law; firstly, that when a person is unable to pay his debts or is otherwise in financial difficulties, then his assets or property, with limited exceptions, should be disposed of and the proceeds used to pay the creditors in proportion to the amounts owed to them; and secondly, that the debtor should be released from the burden of his debts and be enabled to make a fresh start by obtaining a discharge from bankruptcy.

Under the Act, a person unable to meet his debts may voluntarily present to the Registrar in Bankruptcy a petition against himself and thereby become bankrupt. Alternatively, a creditor may petition the Court for the sequestration of a debtor's estate where the debt is not less than \$1,000.00. When a debtor becomes bankrupt by either of these ways his property, and any after acquired property, vests in the trustee of his estate.

A person becoming bankrupt under the Act may be automatically discharged from bankruptcy after the expiration of three years (Section 149) unless discharged earlier by the Court. The Registrar or trustee, or a creditor with the leave of the Court, may lodge an objection to this type of discharge. If it is not withdrawn the debtor must apply to the Court under Section 150 if he desires to be discharged. However an objection will automatically lapse five years from the date of bankruptcy.

A debtor may avoid bankruptcy in some circumstances by authorising a registered trustee or a solicitor to call a meeting of his creditors to make arrangements for the payment of his debts that are acceptable to the creditors. The debtor's property is controlled by the trustee until the creditors resolve otherwise, or the court orders otherwise, or a deed of assignment or arrangement is executed, or a composition is accepted, or the debtor dies or becomes bankrupt.

The *Commonwealth Functions (Statutes Review) Act* 1981 substantially amended the *Bankruptcy Act* 1966. The major amendment provides for a private registered trustee to administer the estate of a debtor made bankrupt on either his own or a creditor's petition, instead of the Official Trustee, unless the Court is satisfied either that the value of the debtor's estate is less than \$10,000.00 or that the petitioning debtor or creditor has been unable to obtain the consent of a registered trustee to administer the estate. If the Court is satisfied as to either of these two criteria the estate is then administered by the Official Trustee.

Bankruptcy Proceedings, Tasmania

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Bankruptcies and orders for administration of deceased debtors' estates—						
Number	97	148	223	267	287	294
Liabilities	\$'000 931	1 607	2 222	3 756	5 012	4 213
Assets	\$'000 361	541	727	2 248	1 329	664
Deeds of assignment, arrangement, composition and schemes—						
Number	5	8	13	22	6	17
Liabilities	\$'000 586	386	1 048	2 202	637	1 475
Assets	\$'000 336	304	594	800	343	931
Total—						
Number	102	156	236	289	293	311
Liabilities	\$'000 1 517	1 993	3 270	5 958	5 649	5 688
Assets	\$'000 697	845	1 321	3 048	1 672	1 595

The Licensing Board

On 10 August 1977 the *Licensing Act*, 1976 was proclaimed which heralded a new era in licensing in Tasmania and made this State one of the trend setters along with the ACT on which our legislation is based. The control of licensing was vested in the Licensing Board of Tasmania.

The regulation of licensing is not new or unique to Tasmania. All states and territories and most countries have a system of licensing to ensure that the public can enjoy liquor in pleasant surroundings and in an atmosphere of conviviality. There are of course problem areas and the Act provides for the general public to lodge complaints in relation to any matters of public concern, e.g. noise, behaviour of patrons, etc.

The Board set standards in respect of all licensed establishments and inspections are carried out at least once a year by a Licensing Inspector, a Health Officer and a Fire Protection Officer.

The Licensing Board of Tasmania, appointed by the Governor comprises: a Chairman; two members, (one of whom must be a legal practitioner or barrister) and a deputy member (who must be a legal practitioner or barrister) who may act as Chairman or member as the need arises.

The Administrator for the Board is the Commissioner for Licensing. A Chief Inspector of Licensed Establishments and Inspectors are appointed under the Act.

The following licences may be granted under the Act, namely:

- (i) *General licences*—Issued in respect of hotels which provide for the sale of liquor for consumption both on and off the premises.
- (ii) *On licences*—Issued in respect of restaurants which provide for the sale of liquor for consumption on the premises.
- (iii) *Club licences*—Issued in respect of sporting clubs, RSL clubs etc. authorising the sale of liquor at licensed clubs.
- (iv) *Off licences*—Issued in respect of wholesale liquor outlets for the sale of liquor in quantities of 9 litres or more for consumption off the premises.

General, On, and Off licences may be issued on limitations relating to:

- (i) The kinds of liquor that may be sold.
- (ii) The classes or descriptions of persons to whom liquor may be sold.

Some examples of limited licences are Rutherglen Holiday Village (Limited General) Albert Hall Convention Centre (Limited On) and Legana Vineyards (Limited Off).

Under the legislation, as it exists at the moment, the Board advertises for objections in relation to applications for Off and Club licences.

The following table shows the number of operative licences as at 30 June 1981:

<i>General</i>	<i>Limited General</i>	<i>On</i>	<i>Limited On</i>	<i>Club</i>	<i>Off</i>	<i>Limited Off</i>	<i>Total</i>
292	3	85	28	195	47	5	655

PRISONS

General

The establishment, regulation and conduct of prisons and the custody of prisoners in Tasmania are provided for under the *Prison Act 1977* which repealed the *Prison Acts 1868* and *1908*. Provision is made for the appointment, by the Governor, of a Controller of Prisons who is responsible for the supervision of prisons, including the initiation and implementation of correctional programs for prisoners and staff training schemes.

Every two years, two appointments are made to the position of Official Visitor to each institution. They visit the prison at least once per month to examine the treatment, behaviour and condition of prisoners, and the condition of the prison.

The main prison in Tasmania is at Risdon near Hobart, which has as an outstation, the Prison Farm at Hayes in the Derwent Valley. The Launceston Prison functioned as a holding centre for prisoners from the northern districts of the State prior to their transfer to Risdon. During 1977-78 that prison was abandoned and the prisoners were transferred to the new Police Headquarters building. Since then the Police Department have taken over the financial responsibility for the operation and control of remandees in Launceston.

The following table shows Prisons Department expenditure from Consolidated Revenue:

Prisons Department: Expenditure From Consolidated Revenue, Tasmania
(\$'000)

<i>Particulars</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Total expenditure	2 753	3 184	3 510	4 020	4 640
Net receipts (a)	86	98	182	164	131
Net expenditure	2 667	3 086	3 328	3 856	4 509

(a) From prison industry and gaol farm activities described later in the text.

Capital Punishment

The death sentence has not been carried out in Tasmania since 1946, but judges pronounced the sentence from time to time until 1968. In October 1968, the Attorney-General introduced a bill to abolish capital punishment and this was passed by the Parliament in December of that year.

Prisoners Received and Discharged

In 1980-81, 690 male and 40 female prisoners were received into H.M. Prison, Risdon. In that period 696 male and 42 female prisoners were discharged. At 30 June 1981 there were 259 male and 3 female prisoners in custody. The figures include persons held on remand. The number of convicted prisoners received during 1980-81 was 525 males and 18 females.

Prisoners' Offences

The following table shows the offences for which convicted prisoners were received:

Offences (a) for Which Convicted Prisoners Were Received into Gaol in Tasmania, 1980-81

Offence for which convicted	Males	Females	Persons	
			Number	Proportion of total
Offences against the person—				
Common assault	68	1	69	3.21
Assault police	11	3	14	0.65
Indecent assault	8	—	8	0.37
Other	39	—	39	1.81
Total	126	4	130	6.05
Offences against property—				
Stealing	434	83	517	24.05
Burglary and breaking offences	218	—	218	10.14
Steal a motor vehicle	94	—	94	4.37
Damage to property	54	5	59	2.74
Obtain goods by false pretences	188	—	188	8.74
Forgery, uttering and currency offences	161	4	165	7.67
Other	128	51	179	8.33
Total	1 277	143	1 420	66.05
Offences against good order—				
Drunkenness	42	1	43	2.00
Escape from lawful custody	2	—	2	0.09
Resist arrest	7	—	7	0.33
Indecent or threatening language	10	3	13	0.60
Fail to pay fines and costs or default	67	—	67	3.12
Other	143	1	144	6.70
Total	271	5	276	12.84
Traffic offences—				
Drive whilst licence disqualified	152	—	152	7.07
Dangerous driving	10	—	10	0.47
Exceed .08 per cent	82	—	82	3.81
Driving under influence	14	—	14	0.65
Other	41	2	43	2.00
Total	299	2	301	14.00
Offences against the <i>Dangerous Drugs Act</i>	22	1	23	1.07
Grand Total	1 995	155	2 150	100.00

(a) The number of offences exceeds the number of prisoners received since some prisoners were convicted of multiple offences.

The next table classifies convicted prisoners according to the number of their previous convictions:

Convicted Prisoners Received into Gaol in Tasmania, 1980-81, According to Number of Previous Convictions (a)

Prisoners	Number of previous convictions				Total
	Nil	One	Two	Three or more	
Number received	165	105	75	198	543
Percentage of total	30.4	19.3	13.8	36.5	100.00

(a) Previous convictions may not necessarily have involved imprisonment.

Age of Prisoners

Young offenders account for a high proportion of receptions. The proportion of convicted male prisoners under 25 years was: 58 per cent in 1975-76; 59 per cent in 1976-77; 60 per cent in 1977-78; 63 per cent in 1978-79; 60 per cent in 1979-80; and 58 per cent in 1980-81. The following table shows the age of convicted prisoners admitted to prison:

Ages of Convicted Prisoners Received into Gaol in Tasmania, 1980-81

Sex	Age group (in years)								Total
	16-17	18-19	20-24	25-29	30-39	40-49	50-59	60 and over	
Males	42	103	155	84	67	42	21	11	525
Females	1	4	8	2	2	1	—	—	18
Total	43	107	163	86	69	43	21	11	543

Parole and Remission of Sentences

Good conduct remissions of up to one third of the sentence for prisoners sentenced to over three months may be granted by the Controller of Prisons.

On 31 March 1976, the *Parole Act* 1975 was brought into effect by proclamation. This Act repealed the *Indeterminate Sentences Act* and provided machinery for the appointment of a three-member Board to deal with the granting of parole to prisoners who had served six months or one third of their sentence, whichever was the greater. It also provided for the Board to make recommendations in relation to the release of prisoners who were serving life sentences or who were dangerous criminals.

Risdon Prison

The Risdon Prison, with provision for 333 prisoners, was opened in November 1960. Male prisoners were then transferred from the old Hobart Gaol and, in June 1963, the Female Prison, the first entirely separate prison for women to be built in the State, was opened on the Risdon site. The following table shows the daily average and highest number of prisoners at Risdon Prison over a six-year period:

Number of Prisoners, Risdon Prison (a)

Prisoners	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Maximum number	365	301	269	343	309	269
Daily average	309	263	241	306	280	249

(a) Includes Hayes Prison Farm.

The Risdon Prison incorporates workshops which serve as a basis for vocational and trade training in such subjects as woodworking, tailoring, sheet metal working, laundry and breadmaking. Educational services include: instruction during working hours for illiterate and semi-literate prisoners; private study during evenings in general academic subjects to Secondary Schools Certificate standard; correspondence courses in University, School Certificate, Higher School Certificate and various technical and commercial subjects; tuition in English for migrants; and training in art and allied subjects. A classification committee interviews all prisoners on admission and decides on each individual's training program.

Groups meet regularly for woodcarving, art, pottery, toy making and chess. Feature and documentary films are screened fortnightly. The Prison Debating Society debates regularly against outside teams. The Education Section publishes a prison magazine periodically. A comprehensive sports program is conducted including athletics, gymnastics and competitions in cricket, volleyball, basketball and football.

The State Library of Tasmania helps with the Prison library, providing a generous supply of books on a rotational basis, to supplement the stock of books owned by the Department. Over 5 000 volumes are immediately available for selection and prisoners may order books of special interest from the State Library System. The Prison library has been designed to develop the library atmosphere. Some 1 100 books are borrowed weekly from the library, all records being kept by prisoner librarians who receive advice from State Library officers.

A new security hospital was completed in 1978 to cater for both the physically ill prisoners and those suffering psychiatric disorders. The unit will accommodate up to 28 bed patients. Daily medical parades are conducted in the hospital for prisoners requiring out-patient type treatment. The building has a fully equipped dental surgery, treatment rooms, physiotherapy and occupational therapy rooms as well as a dispensary and accommodation for medical and para-medical staff.

Prison industries produce articles for government departments and institutions. The following table shows the receipts for prison industries over a five-year period. A laundry installed in 1963 contributes to receipts from sales and services but the amounts are not a true indication of value to the Government, as laundry and other services are provided at a nominal figure for hospitals and other government institutions.

Prison Suspense Account (Prison Industries), Tasmania
(\$)

Particulars	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Receipts (a)	192 132	216 978	247 946	285 473	318 879	397 826
Paid to Consolidated Revenue	27 834	23 076	30 632	63 658	94 728	77 231

(a) Maintenance and material charges are met from receipts, the balance being paid to Consolidated Revenue in the following year.

Hayes Prison Farm

The Prison Farm at Hayes ('Kilderry') is an outstation of the Risdon Prison. It is used to prepare men for a normal way of life through operation of the honour system. Up to 70 prisoners who are regarded as being worthy of trust, regardless of their age, length of sentence or type of offence, are held there.

The following table shows the receipts from sale of farm produce and the amounts paid to Consolidated Revenue over a six-year period:

Prison Farm Suspense Account, Tasmania
(\$)

Particulars	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Receipts (a)	197 173	212 508	224 858	255 277	293 098	316 058
Paid to Consolidated Revenue	57 623	50 027	55 042	33 865	87 251	70 000

(a) Maintenance and material charges are met from receipts, the balance being paid to Consolidated Revenue in the following year.

The 567 hectare property has been developed into a model farm with a great diversity of farming activities. These include: approximately 26 hectares for vegetables; a registered stud of Friesian cattle and Herefords; about 2 000 sheep for wool and fat lambs; a registered herd of Berkshire pigs; poultry; cropping of wheat, oats, lucerne and hay; breeding of children's ponies; and hot house cultivation. In May 1969, 125 hectares of land was purchased near New Norfolk. This property, about two kilometres north of the Hayes Prison Farm, functions as an annexe to the Hayes property. During 1970-71 a sawmill was established on the property but this was subsequently destroyed by vandals and was not rebuilt. A further 100 hectares adjacent to this property was purchased during 1974-75. The Royal Derwent Hospital farm of 297 hectares, including the dairy herd and poultry section, was transferred to the Prisons Department during 1971. Whole milk is

produced and sold in bulk for general use. Building construction activities and machinery maintenance workshops also provide employment, but this range of prison industries is more limited than at Risdon. Similar educational and recreational facilities to those at Risdon are provided.

A new development has taken place recently in the upgrading of the farm's piggery section. Production has been converted to an intensive system housed in two large sheds. One of these is a sow and litter shed with a capacity for 140 breeding sows whilst the other is a fattening shed. It is expected that an annual production of approximately 2 500 porkers and replacement stock will be achieved when the system is fully operational. All of the work has been carried out by inmates under the supervision of departmental staff.

The Probation and Parole Service

The service was established in 1946 and is a division of the Attorney-General's Department. The service is headed by the Chief Probation and Parole Officer, and of the total complement of 60 officers, 43 are probation and parole officers and 17 are clerical and support staff. The head office of the Service is located in Hobart, and there are district offices at Launceston and Burnie and branch offices at Bellerive, Devonport, George Town, Glenorchy and Queenstown. In addition, there are individual probation and parole officers stationed at New Norfolk, Huonville, Ulverstone, Railton and Scottsdale, on a part-time basis.

The main functions of the Service are to provide supervision of persons released from the courts on probation or discharged from prison on probation or parole. Counselling in respect of personal and family matters is offered, as is practical assistance in providing suitable employment wherever possible, and accommodation.

The service undertakes investigations and compiles pre-sentence reports on offenders for the courts and pre-release reports for the Parole Board. In addition, it administers the Work Order Scheme, which was developed and introduced into the Tasmanian criminal justice system in 1972 and which has many benefits for both the offender and the community. From 1 October 1981 work orders became a sentencing option in their own right and ceased to be treated as an alternative to prison.

THE TASMANIAN POLICE

Organisation

The Police Department is headed by the Commissioner of Police who is responsible to the Minister for Police. The Commissioner is assisted by a Deputy Commissioner and two Assistant Commissioners. The highest uniform rank in the Force is that of Chief Superintendent.

The State is divided into three geographical districts with headquarters at Hobart, Launceston and Burnie. The Force also has four specialist branches: Recruitment and Training; Criminal Investigation; Traffic; and Management Services. Each district and branch is under the control of a Superintendent.

General Policing

General policing is performed by uniform personnel who maintain beat patrols on foot and in conjunction with vehicular patrols. Beat police are equipped with radios and are in constant touch with their bases.

Recruitment and Training

Two induction schemes operate (one for adults and another for cadets): (i) adult courses are of 20 weeks duration for persons who have attained the age of 19 years; and (ii) cadet courses are run for youths aged from 16 to 18 years and are of two years duration. Regular in-service courses are conducted for personnel drawn from all ranks and all parts of the State. The Rokeby Academy has administrative, classroom and residential blocks, together with a pistol range, parade ground, library, lecture-theatre, gymnasium and driver training complex. Single-room accommodation is available for 120 students.

Classrooms are equipped with audio-visual educational devices, including closed-circuit television.

Criminal Investigation

While all personnel in the Force have a responsibility for crime detection the Criminal Investigation Branch personnel specialise in this field—members are divided into specialised sections, including the Drug Bureau and Gaming Squad.

Traffic Control

The Traffic Control Branch is responsible for enforcing regulations for the Transport Commission and deploys personnel in cars and on motor cycles. It makes use of sophisticated mechanical and electronic devices.

Management Services

All support services, including the Information Bureau, Scientific Bureau, Planning and Research, Search and Rescue, Transport and Communications Sections, are part of the Management Services Branch.

The Information Bureau maintains a record of previous convictions, property tracing, *modus operandi* of crimes, missing persons and warrants issued as well as statistics on crimes and offences reported and cleared.

The Scientific Bureau provides specialist services in the fields of: (i) Fingerprinting. It has on file approximately 100 000 fingerprint sets. Close liaison is maintained with interstate and overseas sources as well as with the Central Fingerprint Bureau in Sydney. (ii) Photography. Duties involve attendance at the scene of major crimes and serious road accidents. Photogrammetric plans are produced. (iii) Ballistic examinations are provided, together with the maintenance of a ballistics library. (iv) Documents and drawing. Activities include examination of forged documents and use of 'Photo-fit' equipment to aid in the identification of offenders.

The Planning and Research Section is responsible for studying and improving existing work procedures and making recommendations on planning for future development.

A well equipped Search and Rescue Squad is based at Hobart and is augmented by part-time members from other sections of the Force. Duties include rescues from the bush, mountains, cliffs, caves, at sea and underwater. Valuable support is received from walking, climbing and boating organisations. A powerful motor launch, *Vigilant*, with a sea range of 1 300 kilometres is located at Hobart. Smaller craft are stationed at points around the State coastline and at inland waterways.

The mobility of the Force is provided by a fleet of 400 vehicles, including motor cycles, caravans and mobile headquarters.

Radio and telex systems operate both intrastate and interstate. Radio is installed in most cars, boats and motor cycles giving a statewide coverage.

Division of Road Safety

The Division is headed by the Director of Road Safety. It is principally concerned with the development and implementation of Government road safety policy and legislation. It complements facilities available through other departments, authorities, private enterprise and voluntary organisations to ensure that available resources are fully used and co-ordinated.

A school road safety education program is operated throughout the State. Nine mobile Road Safety Officers are employed and supervise 60 part-time Adult Crossing Guards. In addition to school education, the Division is responsible for the preparation and dissemination of general road safety publicity material. Statistics concerning road crashes are used in assessing the value of instituted policies and in the development and initiation of new schemes to promote road safety throughout Tasmania.

Strength of Force

The following table shows the number of police and expenditure:

Tasmania Police: Number and Cost					
Particulars	1976-77	1977-78	1978-79	1979-80	1980-81
Police officers (a)	no. 1 026	1 030	1 043	1 041	1 029
Persons per police officer (a)	no. r 403	r 404	r 401	r 407	415
Cost (total expenditure of Police Department)	\$'000 19 025	22 302	23 346	25 764	28 656
Cost per head of mean population	\$ r 46.05	r 53.70	r 55.92	r 61.18	67.38

(a) At 30 June.

EMERGENCY SERVICES**State Emergency Service**

Following a series of discussions at Federal and State levels the Tasmanian Government, in 1962, decided, in common with other States, to establish a Civil Defence and Emergency Services Organisation for Tasmania. The Government considered that in addition to its intended role in time of war the organisation should be organised and trained to assist in combating natural emergency situations. A Director of Civil Defence and Emergency Services was appointed to plan the new organisation and exercise overall control of volunteer units. In April 1975 the title was changed to State Emergency Service in common with other States. Ministerial responsibility for the State Emergency Service is vested in the Minister for Police and Emergency Services. In February 1981 the Service was transferred from Premier's Department to the Police Department. The Commissioner of Police was, by proclamation, vested with the additional office of Director of Emergency Services.

Legislation

On 1 July 1976, the *Emergency Services Act* came into force. This legislation formally established the State Emergency Service, and set up a counter disaster control structure for dealing with any major emergency or disaster that might affect the State. Under this legislation the State Emergency Service was given wider functions and responsibilities, and the responsibilities of municipalities and other bodies were also set out. Under the Act, when a state of disaster is declared, control is vested in a State Disaster Executive, consisting of the Commissioner of Police, the Director of Emergency Services, and the Ministerial Liaison Officer (Emergency Services).

Functions

The State Emergency Service has the responsibility for ensuring that the community is adequately prepared to meet any disaster situation that may arise. To this end the Service has the roles of co-ordinating emergency planning, provision and co-ordination of emergency training, and co-ordinating all supporting and ancillary emergency organisations in support of police and other authorities in time of emergency or disaster. The Service is responsible for the oversight and production of Counter Disaster Plans at municipal, regional and state level. To advise the Service in this function, specialist planning committees, incorporating senior representatives from government departments and instrumentalities, volunteer organisations and emergency services have been formed in the fields of transport, communications, medical care, welfare and public information. To ensure adequate communications during periods of disaster, the Service has developed a system of communications covering the bulk of Tasmania and with links to the mainland. The communications system provides great flexibility and reliability, and is available for use by all emergency services.

In time of enemy action or hostilities against the State, the State Emergency Service is the co-ordinating authority of all civil defence measures as defined by the Commonwealth and State Governments.

Administrative Structure

State Emergency Service administration in Tasmania is organised on a three-level basis; municipal, regional and State. The State is divided into three regions, centred on Hobart, Launceston and Burnie. Each region is administered by a full-time regional officer assisted by a staff officer, and operations within regions are co-ordinated from regional headquarters. State headquarters (Hobart) is also responsible for maintaining and operating the State Emergency Operations Centre.

Training

Training is undertaken at State and regional headquarters and at municipal level. The State Emergency Service is responsible for the nomination of Tasmanian representatives attending courses and seminars at the Australian Counter Disaster College, Mount Macedon, Victoria. The Service also conducts a variety of counter disaster skills and procedure courses for other Tasmanian emergency services and for involved members of the public, private enterprise and various government departments.

Equipment and Finance

Certain items of protective clothing, operational and training equipment for use by the Service are provided annually by the Federal Government through the Natural Disasters Organisation. All other funding is by the State Government.

Fire Prevention and Fire Fighting

State Fire Commission

Under the provisions of the *Fire Service Act* 1979, which was proclaimed on 1 November 1979, a new single Tasmania Fire Service was created. The State Fire Authority, the Rural Fires Board, and all Urban Fire Brigade Boards which had previously administered the several fire services, were abolished and their functions were assumed by a new State Fire Commission.

The Commission consists of the Commissioner, the Director of Urban Brigades, the Director of Country Brigades, two representatives of local government and a representative of the Treasurer.

The State is divided into three regions (Southern, Northern, and North Western) each under the control of Regional Chief Officers who *inter alia* are responsible for the development of programs of hazard reduction in urban and country areas and protection of life and property; each having regional administrative support. The operational branches of the Service comprise 35 urban brigades and some 300 country fire brigades. Hobart and Launceston brigades are almost totally manned by permanent officers and firefighters while the brigades at Burnie and Devonport are manned by a combination of permanent officers and firefighters, and partly-paid volunteers. All other urban fire brigades are manned by partly paid volunteers; all country fire brigades are manned by unpaid volunteers.

A central Training Division is responsible for the development and implementation of training of all brigades. An Operations Division is responsible for the development of effective operational systems, facilities and procedures. The Fire Prevention Division is responsible for inspection of premises, ensuring that general fire regulations are adhered to, and public education on fire prevention and protection matters.

A central Administration Division of the Fire Service has been developed by the amalgamation of the administrative sections of all previous branches and is responsible, through the Commissioner, to the State Fire Commission.

A Fire Service Advisory Council has been established under the *Fire Service Act* 1979 to: advise the Minister for Police and Emergency Services on any matters affecting the administration of the Act referred to it by him; advise the Commission on any matters relating to preventing and extinguishing fires referred to it by the Commission; and advise the Commission on any matter that should, in the opinion of the Council, be brought to the attention of the Commission. The Council, under a Chairman appointed by the Governor, consists of 17 members representing Tasmania Police, Forestry Commission,

Municipal Association of Tasmania, Tasmanian Farmers and Graziers Association, State Fire Commission Officers' Association, Royal Australian Institute of Architects, Tasmanian Timber Association, pulp and paper manufacturers and woodchip exporters, United Firefighters' Union, Urban Volunteer Firefighters Association, Country Fire Brigades Association, Commissioner of the State Fire Commission, Director of Urban Brigades and Director of Country Brigades.

The funding provisions of the *Fire Service Act* 1979, provide for the ratepayers' contribution to the Fire Service to be related to the cost of operating that category of fire brigade which services the ratepayers' property. The State Government is required to meet the full amount of the costs of those components of the Fire Service which do not have a direct relationship to actual brigade operating costs. In addition, contributions are raised by way of an impost on the insurance industry and by the introduction of a levy on motor vehicle registration, the total of which is used to offset the cost of operating fire brigades.

Further References

ABS Publications

Court Statistics, Tasmania (4502.6), annual.
Prison Statistics, Tasmania (4503.6), annual.
Police Statistics, Tasmania (4504.6), annual.
Year Book Australia (1301.0), annual.

CHAPTER 10

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Chapter 10

LABOUR, WAGES, AND PRICES

EMPLOYMENT

Labour Force and Employment

It is essential to distinguish between 'labour force' and 'employees' since *employment* statistics in this chapter relate mainly to wage and salary earners. These are, however, *only one component of the labour force* which also comprises employers, self-employed persons, unpaid helpers and unemployed persons.

Labour Force

Since the 1966 Census, a set of questions, based on activity in the week before the Census, has been asked to establish who should be included in the labour force. The composition of the labour force as determined by the 1971, 1976 and 1981 Censuses was as follows:

Elements of Labour Force, Tasmania: Censuses, 1971, 1976 and 1981

Year and Sex	Employer	Self-employed	Employee	Unpaid helper	Unemployed	Total in labour force	Total population
1971—Males	6 841	8 442	90 627	277	1 786	107 973	196 442
Females	1 727	1 892	39 649	760	1 261	45 289	193 971
Persons	8 568	10 334	130 276	1 037	3 047	153 262	390 413
1976—Males	6 413	8 977	92 447	441	4 002	112 280	201 512
Females	2 667	3 402	47 253	2 344	2 676	58 342	201 356
Persons	9 080	12 379	139 700	2 785	6 678	170 622	402 868
1981—Males	6 706	9 498	92 771	334	8 547	117 856	208 641
Females	3 112	4 072	52 430	1 479	5 569	66 662	210 316
Persons	9 818	13 570	145 201	1 813	14 116	184 518	418 957

The approach to labour force classification from 1966 has been to ask people to describe their activity in a specific week and the Statistician, using pre-determined definitions, classifies them on the basis of their answers.

Briefly, the questions ask whether the person: (i) had a job or business of any kind last week (even if temporarily absent from it); (ii) did any work at all last week for payment or profit (unpaid helpers who worked were to answer yes); (iii) was temporarily laid off by his employer without pay for the whole of last week; and (iv) looked for work last week (ways of 'looking for work' were specified on the Census form).

The 1966, 1971, 1976 and 1981 labour force included all persons answering *yes* to any one of these four questions. The effect of the new definition was to include additional persons in the labour force. This applied particularly to those working part-time (sometimes for only a few hours a week), some of whom in earlier censuses may not have considered themselves as '... engaged in an industry, business, profession, trade or service'.

The total of persons recorded as unemployed in 1966, 1971, 1976 and 1981 was compiled from persons answering *no* to questions (i), (ii) and (iii) and *yes* to question (iv).

Labour Force Estimates (Intercensal)

The Population Survey

Population censuses tend to be expensive undertakings and are therefore held only at five-yearly intervals. However the demand for regular *census-type* information exists right through the intercensal periods; the most sought data are those describing the labour force. To meet this demand, the Bureau designed in 1960 a special sample of private households and non-private dwellings under the title 'population survey' and it trained teams of interviewers to contact the selected sample units by personal visit with the aim of filling in questionnaires on the spot.

The population survey can be used to collect an extremely wide range of data but the main routine application has been the labour force inquiry, conducted in February, May, August and November of each year up to February 1978 and monthly, thereafter. The questionnaire is filled in for persons 15 years and over within each sampled unit and the definitions of employment, unemployment, etc., are basically the same in concept as those used in population censuses. Naturally the estimates are subject to sampling error. The reliability of estimates based on sample surveys are measured by the 'standard error'. The specialist reader is referred to the Bureau's Canberra Office publication *The Labour Force* (Cat. No. 6203.0), where tables appear stating the standard errors associated with the estimates. The following table gives details of elements of the civilian labour force based on estimates derived from recent population surveys.

Civilian Population 15 Years of Age and Over, by Labour Force Status, Tasmania (a)

Month	Employed (b)		Unemployed (c)		Total labour force (d)		Not in labour force ('000)	Civilian population aged 15 and over ('000)	
	Agri-culture ('000)	Other indus-tries ('000)	Total ('000)	Number ('000)	Per cent of labour force	Number ('000)			Per cent of popula-tion
Males									
1979—									
August	9.0	102.9	111.9	6.3	5.3	118.2	78.3	150.9	
November	10.0	103.3	113.2	5.4	4.6	118.6	78.1	151.8	
1980—									
February	8.8	104.8	113.6	7.2	5.9	120.8	79.1	152.7	
May	7.9	104.0	111.9	6.3	5.3	118.2	77.2	153.2	
August	7.6	105.4	113.0	5.7	4.8	118.8	77.1	154.1	
November	8.2	104.8	113.1	5.9	4.9	118.9	76.9	154.6	
1981—									
February	7.4	108.5	115.9	6.8	5.6	122.7	79.2	155.0	
May	8.9	106.8	115.7	5.5	4.5	121.2	78.0	155.5	
August	8.4	103.3	111.8	7.8	6.5	119.6	76.8	155.7	
November	9.2	103.0	112.2	6.6	5.5	118.8	76.2	155.9	
1982—									
February	9.3	103.1	112.5	10.6	8.6	123.1	78.9	156.0	
May	8.7	100.9	109.6	10.9	9.1	120.6	77.1	156.3	
August	7.6	101.2	108.9	10.7	8.9	119.5	76.2	156.9	

continued next page

Civilian Population 15 Years of Age and Over, by Labour Force Status, Tasmania (a)—continued

Month	Employed (b)			Unemployed (c)		Total labour force (d)		Not in labour force ('000)	Civilian population aged 15 and over ('000)
	Agri-culture ('000)	Other industries ('000)	Total ('000)	Number ('000)	Per cent of labour force	Number ('000)	Per cent of population		
Females									
1979—									
August	2.3	59.0	61.3	6.2	9.2	67.5	43.9	86.5	154.0
November	3.1	57.0	60.1	5.0	7.7	65.2	42.1	89.5	154.7
1980—									
February	2.9	57.2	60.1	6.4	9.6	66.5	42.8	89.0	155.5
May	3.1	55.9	59.1	5.4	8.3	64.4	41.3	91.7	156.1
August	2.4	57.7	60.1	3.8	6.0	63.9	40.7	93.1	157.0
November	2.7	58.4	61.1	5.2	7.9	66.3	42.0	91.6	157.9
1981—									
February	3.0	58.0	61.0	5.9	8.8	66.9	42.0	92.5	159.4
May	3.3	60.3	63.6	4.6	6.7	68.2	42.5	92.4	160.6
August	2.8	58.4	61.2	5.9	8.8	67.1	41.6	94.4	161.5
November	2.9	58.4	61.4	5.7	8.5	67.1	41.3	95.1	162.2
1982—									
February	2.3	55.1	57.4	7.5	11.5	64.8	39.8	98.1	162.9
May	2.4	56.9	59.3	6.5	9.9	65.8	40.3	97.6	163.4
August	3.0	56.5	59.6	6.9	10.4	66.5	40.6	97.4	163.9
Persons									
1979—									
August	11.3	161.9	173.2	12.5	6.8	185.8	60.9	119.1	304.9
November	13.1	160.3	173.3	10.4	5.7	183.8	60.0	122.7	306.5
1980—									
February	11.7	162.1	173.8	13.6	7.2	187.3	60.8	120.9	308.2
May	11.0	159.9	170.9	11.7	6.4	182.6	59.0	126.6	309.2
August	10.0	163.1	173.1	9.5	5.2	182.6	58.7	128.5	311.1
November	10.9	163.2	174.2	11.1	6.0	185.3	59.3	127.2	312.5
1981—									
February	10.3	166.5	176.9	12.8	6.7	189.6	60.3	124.8	314.4
May	12.2	167.2	179.4	10.1	5.3	189.5	59.9	126.6	316.1
August	11.2	161.8	173.0	13.7	7.3	186.7	58.9	130.5	317.2
November	12.2	161.4	173.6	12.3	6.6	185.9	58.4	132.2	318.1
1982—									
February	11.6	158.2	169.9	18.1	9.6	188.0	58.9	130.9	318.9
May	11.1	157.8	168.9	17.5	9.4	186.4	58.3	133.4	319.7
August	10.6	157.8	168.4	17.6	9.5	186.0	58.0	134.7	320.7

(a) This series is based on a regular survey of a sample of the population. The estimates relate to all persons aged 15 years and over with the exception of members of the permanent armed forces and certain diplomatic staff.

(b) Includes all those who, during the survey week: (i) worked for one hour or more for pay or profit; or (ii) worked 15 hours or more without pay in a family business (or farm); or (iii) were employees who had a job but were not at work and were on paid leave, leave without pay for less than four weeks up to the end of the survey week, stood down, on strike or locked out, on workers' compensation and expected to return to their jobs or receiving wages and salaries while undertaking full-time study; or (iv) were employers or self-employed persons who had a job, business or farm but were not at work.

(c) Includes all those who, during the survey week, were not employed and who: (i) did not have a job and were actively seeking full-time or part-time work, or (ii) who were laid off without pay for the whole week.

(d) Includes all those classified as employed or unemployed during the survey week.

Employment by Industry, Tasmania (a)
(*000)

Industry									
Month	Agriculture and services to agriculture	Manufacturing	Construction	Wholesale and retail trade	Finance property, business services	Community services	Recreation, etc.	Other industries (b)	Total
Males									
August—									
1977	8.8	26.3	15.4	17.6	4.6	9.4	5.4	25.2	112.7
1978	9.5	22.9	14.4	19.6	6.6	9.5	4.0	24.7	111.2
1979	9.0	22.3	13.6	20.6	4.9	10.6	4.6	26.3	111.9
1980	7.6	23.3	13.7	19.8	7.2	11.0	4.1	26.3	113.0
1981	8.4	22.1	13.0	19.7	6.3	12.5	4.5	25.2	111.8
1982	7.6	20.7	12.4	17.8	5.5	13.6	4.6	26.7	108.9
Females									
August—									
1977	3.1	5.4	(c)	12.1	5.1	16.0	7.4	5.9	56.0
1978	2.3	5.1		13.0	5.1	18.4	5.4	4.5	54.7
1979	2.3	5.1		15.6	5.4	17.8	8.0	5.4	61.3
1980	2.4	4.1		12.9	7.0	18.9	7.2	6.1	60.1
1981	2.8	5.6		12.6	4.3	21.3	6.9	6.7	61.2
1982	3.0	3.6		11.9	4.5	22.3	7.2	5.9	59.6
Persons									
August—									
1977	11.9	31.7	16.5	29.7	9.7	25.3	12.9	31.1	168.7
1978	11.8	28.0	15.3	32.6	11.7	27.9	9.4	29.3	165.9
1979	11.3	27.5	15.3	36.2	10.4	28.4	12.6	31.7	173.2
1980	10.0	27.4	15.1	32.8	14.1	29.9	11.3	32.4	173.1
1981	11.2	27.7	14.2	32.2	10.6	33.8	11.4	31.9	173.0
1982	10.6	24.3	13.6	29.7	10.0	35.8	11.8	32.6	168.4

(a) These figures are derived from the Labour Force Survey, and should only be used as an indication of longer term trends in employment. The ABS is planning to implement an extended survey of private employers each quarter to provide a new series of employment estimates. Further details may be found in the Information Paper (Cat. No. 6239.0) issued on 8 July 1981.

(b) Includes following industries: (i) Forestry, Fishing and Hunting; (ii) Mining; (iii) Electricity, Gas and Water; (iv) Transport and Storage; (v) Communications; (vi) Public Administration and Defence.

(c) Subject to sampling variability too high for most practical uses.

For many years the ABS produced two series of employment statistics. One series is based on the monthly Labour Force Survey; the second was based on data derived from employers' pay-roll records—mainly pay-roll tax records in the case of private employers. The former series provides estimates of total employed persons and their characteristics. The series based on pay-roll data provided estimates of wage and salary earners in civilian employment only but gave a more detailed industry break-up than available from the Labour Force Survey.

The two series differed in coverage, content, sources of information, collection methodology and estimation procedures. The pay-roll based series had a particular problem of lack of information about employment in those firms which had pay-rolls below the pay-roll tax exemption level. This was compounded by states adopting different exemption levels. The ABS had assumed that employment in these small firms changed in the same proportion as employment in the larger firms. The ABS had regarded this assumption as unsatisfactory for some time.

From late 1979 the wage and salary earners in civilian employment (civilian employees) and Labour Force series diverged considerably. The latter series grew much more rapidly than the civilian employee series. This led the ABS to review its employment statistics.

The outcome of the review was:

- (i) a finding that the civilian employee series had underestimated the rate of growth in employment in 1979-80. This resulted from under-estimation of the employment in firms below the pay-roll cut off level;
- (ii) reliable statistics of employment by sex and industry at Australia, state and territory levels were needed by users;
- (iii) the Labour Force Survey provided reliable long term indications of change in employment but the month-to-month changes in employment were not always reliable;
- (iv) a decision to discontinue the pay-roll tax based civilian employee series for the private sector. The ABS continued its publication of estimates, which are based on direct collection, of civilian employment in government and government bodies;
- (v) development of an ABS survey to provide an employee series to replace the old civilian employee statistics. The survey will be quarterly and under ABS control. Data will be collected for compilation of employment estimates and average weekly earnings figures. The surveys will be implemented under the new system over a period of three quarters (June, September and December) in 1983. Under the proposed introduction schedule there will be an overlap of one quarter with present surveys so that linking of series can be achieved.

Civilian Employees of Government Bodies

In Tasmania, as in other Australian states, a relatively high proportion of wage and salary earners is employed by government bodies operating at four levels; federal, state, local and semi-government (with the complication that semi-government authorities may have been created by either federal or state legislation). For the purpose of these statistics, government employees include persons working on government services such as railways, bus services, banks, post offices, power and light, air transport, education (including universities), radio, television, police, public works, government factories, departmental hospitals and institutions, etc., as well as those engaged in administrative services.

Estimates of private and government employment are on a revised basis which has been designed to achieve uniformity of classification with other statistical collections. The principal changes affecting the private/government dissection of employment estimates are as follows:

- (a) *Hospitals*: Non-departmental 'public' hospitals (other than those run by religious or charitable organisations) are now classified to State Government.
- (b) *Marketing Authorities*: All marketing authorities or boards (other than those which are purely growers' or producers' co-operatives) are now included in the government sector as they exercise functions which are fundamentally those of government.

The following table shows the number of government employees in Tasmania according to the level of government:

**Civilian Employees of Government Bodies, Tasmania, at 30 June
(000)**

Year and Sex	Level of government			Total
	Federal (a)	State (a)	Local	
1980—Males	7.3	20.4	2.6	30.3
Females	2.3	16.3	0.5	19.3
Persons	9.7	36.7	3.1	49.5
1981—Males	7.3	20.2	2.6	30.2
Females	2.3	16.0	0.5	18.8
Persons	9.7	36.2	3.1	49.0
1982—Males	7.1	20.4	2.5	30.1
Females	2.4	16.4	0.5	19.3
Persons	9.5	36.8	3.1	49.3

(a) Includes semi-government authorities.

Department of Employment and Industrial Relations

The Department of Labour and National Service was established in 1940 to bring together employment and industrial functions which were then being undertaken by various other departments. It became the Department of Labour in 1972 but was re-constituted as the Department of Labor and Immigration in 1974 to incorporate the immigration function. The Department was renamed Employment and Industrial Relations in 1975 when the responsibility for immigration was transferred to the new Department of Immigration and Ethnic Affairs.

The Department was divided in 1978 into a Department of Industrial Relations and a Department of Employment and Youth Affairs; the Office of Youth Affairs was, at that time, transferred to Employment and Youth Affairs from the former Department of Environment, Housing and Community Development. In 1982 the two departments were reunited to form the Department of Employment and Industrial Relations.

Industrial Relations

The Industrial Relations Division of the Department is responsible for the continuous review and evaluation of the social and economic effects and implications of industrial relations developments in Australia and overseas, for formulation of policy advice to Government on effective industrial relations, and the co-ordination and implementation of Government industrial relations policy.

Through its Working Environment Branch the Division also seeks to encourage and help organisations to:

- (i) improve their productivity by more efficient use of their human resources;
- (ii) improve the quality of work life and job satisfaction of employees through the application of personnel and participative systems.

Local Trades Committee: For persons who have not completed an Australian apprenticeship, national recognition as a tradesman in the metal, electrical and footwear trades may be obtained by way of a Tradesmen's Certificate issued under the *Tradesmen's Rights Regulations Act 1946*.

In brief, the Tradesmen's Certificate may be issued by the Local Trades Committee to:

- (i) settlers from overseas suitably qualified by specific overseas trade training and/or employment experience;
- (ii) suitably experienced people who have learned the skills of the trade informally on the job;
- (iii) ex-servicemen who have completed specific trade training other than apprenticeship while serving in the Australian defence forces.

Employment

The Employment Division of the Department is responsible for the formulation of national manpower policies including responsibility for the operation of the Commonwealth Employment Service (CES) under the *Commonwealth Employment Services Act 1978*.

The Commonwealth Employment Service

The Commonwealth Employment Service (CES) was originally established by federal legislation under Section 47 of the *Re-Establishment and Employment Act 1945* and under the *Social Services Legislation Declaratory Act 1947*. In August 1978 a new *Commonwealth Employment Service Act* was passed providing for a National Director and State Directors of the CES and national, state and local committees, with an advisory role comprising a range of representatives from the community.

The functions of the CES are:

- (i) To assist persons seeking employment or a change in employment to obtain suitable positions having regard to their experience, training or qualifications, and to the economic and other needs of the Australian community. In particular to: (a) provide persons with information relating to employment, such as advice about qualifications for occupations and vocational guidance; and (b) make special arrangements and facilities to assist immigrants, Aborigines, the young, the handicapped, school leavers and those with professional or technical qualifications or those who have special requirements or disadvantages in relation to employment.
- (ii) To assist employers to fill vacant positions with available persons who are suitable for the performance of the duties and who meet employers' requirements for the positions.
- (iii) To promote and implement manpower programs and other measures designed to ensure a high level of employment.
- (iv) To register persons who are unemployed and who wish to claim unemployment benefits under the *Social Services Act 1947* and provide help in seeking employment for persons claiming or receiving such benefits.

Persons Receiving Unemployment Benefit

It is possible for a person to register as unemployed but make no claim for unemployment benefit. On the other hand, a person claiming unemployment benefit is required to register for employment. The next table gives details of persons receiving unemployment benefit each month for recent years:

Number of Persons Receiving Unemployment Benefit, Tasmania (a)

Month	1976	1977	1978	1979	1980	1981	1982
January	8 516	7 397	9 244	11 244	11 621	12 310	15 505
February	7 169	7 501	9 577	11 876	11 849	12 910	16 127
March	6 438	6 926	8 785	11 028	11 143	12 169	15 202
April	6 425	6 575	9 119	9 975	10 421	12 112	15 196
May	6 611	6 554	9 383	10 104	10 651	12 414	15 643
June	7 228	7 078	9 757	10 420	11 121	12 929	16 263
July	7 603	7 978	9 770	9 922	10 902	13 175	16 977
August	7 609	7 917	9 935	10 257	10 750	13 893	17 714
September	7 541	8 083	10 206	10 503	10 770	15 137	18 781
October	7 210	8 037	9 812	10 203	10 921	13 663	18 950
November	7 053	7 179	9 639	9 882	10 722	13 238	18 570
December	7 009	7 610	9 508	10 180	10 753	13 396	n.y.a.

(a) Compiled from information furnished by the Department of Social Security. From March 1976 monthly figures are not directly comparable because of differences in accounting periods. Some monthly figures relate to the end of a four-week period and others to a six-week period. Prior to March 1976 the figures relate to the Saturday nearest the end of the month.

Manpower Training Programs

The Department develops and administers training schemes to give people the skills and experience they need to obtain and keep employment. These programs have the joint functions of helping to overcome identified shortages of skills in the labour market and assisting in the long term restructuring of the work force. Programs include:

Youth Training

(i) *School to Work Transition Program (SWTP) and Educational Program for Unemployed Youth (EPUY)*: The Department is closely involved with the State and Commonwealth Education Departments in the administration of these schemes which provide courses at Technical and Further Education (TAFE) Colleges for young people who need further education or skill training before they can obtain employment. The courses are vocationally oriented and include pre-apprenticeship courses as well as literacy and numeracy training. Trainees attending these courses are paid special allowances.

(ii) *The Special Youth Employment Training Program (SYETP)*: The CES pays employers a subsidy to employ and train young people aged 15 to 24 who have been unemployed for at least 4 months. Higher subsidies are paid for young people aged 18 to 24 who have been unemployed for 8 months or more.

Special Training

(i) *Disabled Persons*: Under these programs disabled people may receive allowances to attend formal courses. Employers may receive subsidies for offering disabled persons on-the-job training. The subsidies are higher than those available to other groups because of the particular difficulties faced by disabled persons.

(ii) *Aboriginals*: A national employment strategy has been developed to provide training and employment for Aboriginals. As well as training in the public sector, private employers are paid subsidies to employ Aboriginals who receive on-the-job training.

(iii) *Special Needs Job Seekers*: Persons assessed as having difficulty in finding or keeping employment because of social, cultural or other personal factors may receive assistance in the form of subsidised on-the-job training for a period twice that normally provided for a given occupation.

Skills Training

(i) *General Training Assistance*: General training assistance for individuals is provided through training allowances while undertaking formal courses and subsidies to employers to provide on-the-job training.

(ii) *Skills in demand*: Assistance is available under this program:

- to provide assistance to industry to establish new or improved training arrangements, particularly those of a nationally consistent nature;
- to provide assistance to industry to overcome skill shortages;
- to assist unemployed persons with training to enable them to obtain stable employment.

To attract funding, there should be a current or anticipated industry shortage in a particular locality and/or the need established for a new training arrangement to overcome inadequacies in current arrangements or to put in place a new training arrangement where none previously existed.

In the selection of trainees:

- there should be joint industry/Government development of selection criteria;
- the Commonwealth Employment Service (CES) will ascertain whether there are unemployed people who meet the selection criteria;
- the selection panel for trainees will comprise industry representatives and Department of Employment and Industrial Relations.

(iii) *Industry Training Services*: This program is designed to aid and stimulate the systematic training programs through all sectors of industry and commerce. The program

funds the operation of the National Training Council and the Industry Training Committees. The aim is to use training to promote efficiency, productivity and safety as well as industry's capacity to cope with new equipment, new techniques and changes in processing and market requirements.

Industry Training Committees are established in Tasmania in the following industries: building and construction, dairying, fishing, local government, printing, retail motor, timber, tourism and wool producing.

Trade Training

The Commonwealth encourages employers to indenture and train apprentices. The Commonwealth Rebate for Apprentice Full-Time Training (CRAFT) provides employers with an incentive to increase the number of apprentices they employ and to improve the quality of training. Under the CRAFT scheme tax free rebates are paid to employers for each day an apprentice is released from work to undertake formal training. An allowance is payable to some apprentices who have to live away from home during their apprenticeship.

Special Apprentice Training Schemes: In addition to CRAFT, special arrangements under a variety of schemes can be made to encourage improvement in the quantity and quality of apprentice training.

Community Youth Support Scheme

The Community Youth Support Scheme (CYSS) is a Federal Government scheme which was introduced in October 1976 as a means of encouraging local community groups to become involved in assisting unemployed young people. The scheme, which is the first of its kind, recognises that young people experiencing periods of unemployment at a time when there is a shortage of jobs may need support or assistance.

The form in which this support may be offered varies according to the particular needs of the young people concerned. Organisations and groups within the community are encouraged to seek funding to run programs and services for young unemployed people. The scheme is designed to complement other Government initiatives previously introduced to increase employment and training opportunities for young people. Accordingly, CYSS programs must contain some orientation towards employment. This need only be in fairly general terms. It is not intended that CYSS should provide formal skills training as this may be dealt with under Manpower Training Schemes.

CYSS is not a job creation program, nor is it a means of getting jobs done for organisations which need free labour. CYSS may help young people in several ways:

- (i) by better equipping them to get a job. Sessions on how to handle job interviews, how to go about applying for a job and even where to look for jobs will give a young person confidence and a better chance of finding employment.
- (ii) by giving assistance with social, financial, educational, health and general welfare problems that could be making it more difficult for them to find employment.
- (iii) by providing a wide range of activities to make the period of unemployment more interesting and more creative. Because of the shortage of job vacancies some young people may face long periods of unemployment. They may become bored, frustrated and disillusioned. CYSS funds may be used to provide outdoor activity, art and craft workshops, sessions on basic car maintenance, cookery, etc.

Any young person registered with the Commonwealth Employment Service is eligible to participate in CYSS projects. Bus fares and other necessary expenses incurred in attending a CYSS project are reimbursed up to a maximum of \$6 per week.

International Youth Year

The United Nations has designated 1985 as the International Youth Year (IYY) and has agreed to the Department of Employment and Industrial Relations taking the co-ordinating role for the IYY. An interim secretariat has been set up in the Office of Youth Affairs.

The themes set by the UN are participation, development and peace. These call for:

- (i) recognition of young people's ability and judgement;
- (ii) encouragement of the participation of young people in national achievement and development;
- (iii) enhancing the capacity of young people to better their lives and realise their full potential;
- (iv) ensuring that young people are allowed to grow up in an environment of respect, understanding and equality.

1982-85 will be the lead up period to IYY itself. Consultations are already taking place to elicit preliminary ideas for IYY.

Tasmanian Committee on Discrimination in Employment

On 15 June 1973, the Australian Government ratified Convention No 111 of the International Labour Organisation—Discrimination (Employment and Occupation) 1958. Over 80 countries throughout the world have now ratified this important human rights convention.

For the purposes of the Convention the term 'discrimination' includes "... any distinction, exclusion or preference made on the basis of race, colour, sex, religion, political opinion, national extraction or social origin, which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation".

In a move unique among the signatory countries to the Convention, Australia established Committees on Discrimination in Employment and Occupation to act as operational bodies in promoting the ideal of equal opportunity in the work force. The Committee has a tripartite structure, with representatives of both Australian and State Governments, of employers and employees. They are presided over by an independent Chairman. The Tasmanian Committee is part of the Australia-wide machinery.

The Committee's chief aim is to enlist community support, through a nation-wide education and publicity campaign, in the promotion and acceptance of a policy of non-discrimination. Discrimination in employment is an anti-social activity which militates against the basic principles of human rights.

The Tasmanian Committee investigates complaints of discrimination from members of the public. Most of the cases dealt with so far have been complaints on sex grounds and on the basis of race or nationality. Complaints are followed up with the employer concerned, and a feature of the Committee's work has been the co-operation and support it has received from most employers.

The Committee also deals with complaints of sexual harassment in employment, and discrimination on the grounds of age, marital status, criminal record, disability, sexual preference, nationality and other grounds.

The Tasmanian Committee has been heartened by the progress which has been made in efforts to eliminate discrimination in the work force. Since it began operating in July 1973 it has seen increasing awareness by employers, employees and members of the public, of the problems of discrimination and, more importantly, of positive measures which can be taken to overcome those problems.

The Committee's role is primarily educative and conciliatory. It has no statutory powers and should not in any way be regarded as a punitive body.

INDUSTRIAL LEGISLATION AND CONDITIONS

Apprenticeship

Apprenticeship Commission

The Apprenticeship Commission was set up under the *Apprentices Act* 1942 to: (i) encourage, regulate and control training in proclaimed trades; (ii) assist youths towards successful trade courses; and (iii) provide properly trained craftsmen for industry. The Commission, which meets each month, consists of three representatives of trade unions, three of employers' organisations, a nominee of the Minister for Education and the President, all members being appointed for a three-year term. To keep the Commission up-to-date with the latest developments, Trade Committees have been formed for particular industries, with both employers and employees represented.

Apprentices are trained at work and at technical classes, and supervisors report on the effectiveness of the training; supervisors also give on-the-spot advice to employers and apprentices where their mutual obligations are concerned and refer matters that cannot be settled in this way to the Commission for decision.

Apprenticeships

An apprenticeship may not be commenced without prior application to the Commission which determines the suitability of employers for training apprentices and the educational qualifications required for entry to a particular trade.

The apprentice serves a three month probationary period before a contract (indenture) is made and formally signed by the employer, parent/guardian, and apprentice, prior to being registered with the Commission. The Commission determines disputes arising between the indentured parties' rights and duties; no apprenticeship may be terminated, suspended or assigned other than by its authority. When an apprenticeship has been completed, the employer and the Commission certify the original indenture to this effect. Where apprentices are required to undertake technical training such instruction is mandatory. Apprentices who attend technical classes during working hours do so without loss of pay. (Country apprentices in remote areas attend Block Release Training, usually three fortnightly training periods each year.) The progress of apprentices at Technical colleges is reported to the employer, parent/guardian, and the Commission where unsatisfactory reports are investigated. An annual training progress and attendance report is also required to be submitted to the Commission by the employer.

Apprentices are encouraged in the following ways: (i) by payment of *proficiency allowances* for annual examinations passed successfully in the allotted time; (ii) by *certificates of proficiency* for apprentices successfully completing the mandatory trade course of technical instruction; (iii) by reducing the apprenticeship term by one year in some cases, where the qualifying trade course is completed in the allotted time; and (iv) by the award of bursaries.

The Commission offers an award to the outstanding apprentice in each of the building, automotive, electrical, metal and other trades, and from these five apprentices, the 'Apprentice of the Year' is selected and qualifies for an award of \$600. Other awards are to the value of \$450. Should there not be any outstanding apprentice in any particular trade group, the prize allotted for that group may be awarded to another trade group.

Number of Apprentices

The following table shows the number of apprentices in Tasmania and also details of apprenticeships registered and completed:

Number of Apprentices, Apprenticeships Registered and Completed, Tasmania

Particulars	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Number at 30 June (a)—						
Indentured apprentices	4 285	4 450	4 424	4 445	4 465	4 466
Apprentices on probation	183	356	320	330	296	332
Total	4 468	4 806	4 744	4 775	4 761	4 798
During year—						
New apprenticeships registered	1 413	1 427	1 271	1 278	1 379	1 362
Apprenticeships completed	1 052	1 007	1 077	1 007	1 140	1 190

(a) Distributed in proclaimed trades.

Industrial Safety and Accident Prevention

General

Responsibility: The Department of Labour and Industry administers legislation relating to safety, health and welfare in work places generally (but excluding work places subject to the *Mines Inspection Act* 1968 which prescribes safety standards for mines and mining works and is administered by the Mines Department). The Department's Technical Services Division inspectorate performs inspection and advisory functions throughout the State.

Prevention: Prevention obviously has a two-fold aspect: (i) inspection programs aimed at pin-pointing unsafe working conditions; and (ii) education and training designed to eliminate unsafe actions.

Training: The Department endeavours to develop an attitude of 'safety consciousness' among employees and employers. This is the primary aim of general safety training. More specific training is basically aimed at educating supervisors and foremen, since an attitude of 'safety consciousness' must involve management. Formal training in industrial safety and accident prevention is available at Hobart and Launceston Technical Colleges in two year courses. Informal training is arranged by the Department of Labour and Industry, the two-day courses being based on the concept of 'training within industry'. Single sessions on industrial, farm and forest safety are also available and the Department makes arrangements to provide instructors on request.

Safety Officers: It is expected that large undertakings will have their own specialists concerned with safety matters. However, government safety officers are available to industries which may use their services for short periods. Their function is purely advisory and they assist organisations which wish to stress safety or to reduce their accident rates.

Legislation

The Industrial Safety, Health and Welfare Act 1977 deals with physical working conditions generally and applies to all premises or places where people work (excepting mines and mining works which are subject to comparable standards imposed under the *Mines Inspection Act* 1968). In addition to general working standards set down in the Act and associated regulations, requirements for the use of boilers, other pressure vessels and lifting machinery are specifically prescribed. These regulations also cover work in the building and construction industry and the rural and forest industries.

Industrial Accidents

Industrial accident statistics in Tasmania are compiled from returns of workers' compensation claims submitted by insurance companies, self-insurers and State Government departments. From 1977-78 the returns have been submitted by insurers to cover the number of accidents that occurred during a financial year. Previously, returns were collected for cases finalised during a financial year.

The collection is limited to those employees covered by the Tasmanian *Workers' Compensation Act* and therefore excludes self-employed persons, Federal Government employees and the police. Exclusion of self-employed persons is likely to reduce coverage in industries where self-employment is prevalent (e.g. retail trade, rural industries, etc.). Because of the exclusion of Federal Government employees, some industries are not covered at all, while coverage is considerably reduced in other industries (e.g. communications).

In compiling the statistics the following definitions have been adopted:

Industrial Accident: A compensatable claim under the *Workers' Compensation Act* 1927 that arises out of a work related event and leads to a loss of time of one day (shift) or more, permanent total incapacity or death.

Time Lost: The actual time lost from work of persons reported to be temporarily incapacitated or permanently partially-incapacitated as a result of a compensated work injury.

Cost of Claims: Includes compensation for wages lost, hospital and medical expenses and lump sum settlements of cases finalised during the year ended 30 June. Insurers are asked to estimate the cost of claims not finalised by 31 October of the following financial year.

Industry Groups: Classified in accordance with the Australian Standard Industrial Classification.

The table that follows shows the number of industrial accidents reported during 1980-81 by the extent of disability:

Industrial Accidents: Industry Group and Extent of Disability, Tasmania, 1980-81

Industry Group	Extent of Disability				Total number of accidents
	Temporary	Permanent partial	Permanent total	Death	
Agriculture, forestry, fishing and hunting ..	569	7	—	2	578
Mining	1 255	3	1	1	1 260
Manufacturing—					
Food, beverages and tobacco	563	7	—	—	570
Wood, wood products and furniture	950	9	—	—	959
Non-metallic mineral products	100	—	—	—	100
Basic metal products and fabricated metal products	1 025	11	2	1	1 039
Transport equipment	65	—	—	—	65
Miscellaneous	957	8	—	1	966
Electricity, gas and water	595	—	—	1	596
Construction	1 730	19	—	3	1 752
Wholesale and retail trade	1 350	41	—	—	1 391
Transport, storage and communication	479	2	—	3	484
Finance, property and business services	216	3	—	—	219
Public administration and defence	363	1	—	—	364
Community services	758	6	—	1	765
Recreation, personal and other services	391	8	1	—	400
Total	11 366	125	4	13	11 508

The time lost and cost of claims arising out of industrial accidents, as applicable to each industry group, is shown in the next table:

Industrial Accidents: Industry Group, Time Lost and Cost of Claims, Tasmania, 1980-81

Industry Group	Time Lost (a)		Cost of Claims		
	Duration of Leave (Days)	Average Leave (Days)	Non-fatal Accidents (\$)	Fatal Accidents (\$)	Average Per Non-Fatal Accident (\$)
Agriculture, forestry, fishing and hunting ..	12 116	21	441 040	11 302	766
Mining	18 205	14	1 225 753	50 000	974
Manufacturing—					
Food, beverages and tobacco	8 373	15	389 962	—	684
Wood, wood products and furniture	15 174	16	864 521	—	901
Non-metallic mineral products	1 737	17	73 460	—	735
Basic metal products and fabricated metal products	13 122	13	815 718	3 000	786
Transport equipment	1 085	17	47 315	—	728
Miscellaneous	14 718	15	833 793	46 564	864
Electricity, gas and water	8 456	14	436 083	10 721	733
Construction	23 912	14	1 101 416	97 660	630
Wholesale and retail trade	19 041	14	818 814	—	589
Transport, storage and communication	8 082	17	410 435	121 433	853
Finance, property and business services	3 236	15	1 076 122	—	4 914
Public administration and defence	5 034	14	214 033	—	588
Community services	16 935	22	782 112	26 000	1 024
Recreation, personal and other services	7 406	19	281 427	—	704
Total	176 632	15	9 812 004	366 680	854

(a) Temporary and permanent partial disability cases only.

Workers' Compensation

Legislation: Workers' compensation legislation in Tasmania was first introduced in 1910 but it was not until 1927 that the principle of compulsory insurance was embodied in the *Workers' Compensation Act 1927*.

Purpose and Limitations: The principle of the Act is provision for compensation on the death or disablement of a worker, if occasioned by personal injury arising out of and during the course of employment and while travelling in either direction between his residence and place of employment. The Act provides that this cover to and from work applies only for reasonably direct journeys, except for breaks or deviations connected with the worker's employment. Coverage is also provided for workers who are temporarily absent from work during meal breaks. Self-inflicted injuries are excluded and certain limitations are applied where serious or wilful misconduct is involved. Monetary benefits have fixed limits. All reasonable costs of medical, hospital, nursing and ambulance services and in the event of death, the reasonable costs of burial or cremation are paid. In addition, weekly payments are made during periods of incapacity and there is provision for a lump sum entitlement for specified injuries included in a schedule to the Act.

Non-contributory Basis: The Act is non-contributory, i.e. the worker does not pay into any fund for the provision of benefits. The employer is obliged to insure with an approved insurance company against the liability to compensation, except in certain cases where he is allowed to carry his own risk. In any case where an employer has no paid-up insurance policy, where the employer cannot be found or where the employer or his insurance company has become insolvent, the worker may claim against a 'nominal insurer', as if he were the employer. Amounts paid by the 'nominal insurer' are provided by all insurance companies carrying on workers' compensation business. Each company is required to contribute to these types of claims in proportion to the premium income derived from policies issued during the preceding year.

Compensation on Death: Where death results from an injury, the compensation payable to dependants wholly dependent on the worker's earnings is 284 times the current Hobart basic rate, plus seven times the current Hobart basic rate for each worker's child

under sixteen years at the date of injury. Partial dependants are entitled to proportionate amounts.

Basic Rate means the minimum weekly wage payable to the lowest paid adult male employed at Hobart under the federal Metal Trades Award (in May 1981 the minimum was \$145.80 per week).

Weekly Payments During Incapacity: When the worker is *totally incapacitated* he is entitled to receive weekly compensation payments at whichever of the following alternatives is greater: (i) the rate of his average weekly earnings over the period of 12 months immediately preceding the period of incapacity; or (ii) the ordinary time rate of pay for the work on which he was engaged immediately prior to the period of incapacity. When the worker is *partially incapacitated* the weekly payments are reduced by any amount that he is able to earn in some other suitable employment.

Maximum Limit of Weekly Payments: In cases of partial or total incapacity of any worker, the total liability of an employer in making weekly compensation payments is limited to 284 times the current Hobart basic rate.

Lump Sum Payments: In addition to weekly incapacity payments, lump sum payments are made in respect of the loss of members of the body or of bodily powers of function. In the Act, specific injuries are listed and the single amount payable is related to the current Hobart basic rate (specified as B in the following examples): (i) loss of both feet, $B \times 284$; (ii) loss of leg, $B \times 138$; (iii) loss of thumb, $B \times 51$; and (iv) loss of great toe, $B \times 35$, etc. Where more than one of these injuries are suffered in the same accident, a maximum payment equal to $B \times 532$ may be paid.

Long Service Leave

The *Long Service Leave Act 1976* provides for the granting of 13 weeks long service leave to all employees who complete 15 years continuous service with one employer. A pro-rata entitlement applies in respect of termination of employment after less than 7 years service in certain circumstances.

Contributions to a Long Service Leave (Construction Industry) Fund, (formerly Long Service Leave (Casual Employment) Fund) are made by employers with respect to all casual employees covered by the Act. For further details, reference should be made to the 1977 or earlier editions of the *Year Book*.

TRADE UNIONS

The following table shows details of the number of unions and the number of union members in Tasmania:

Trade Unions: Numbers and Membership, Tasmania (a)

Year ended 31 December	Number of separate unions	Number of members (^{'000})	Annual increase in membership (percent) (b)	Year ended 31 December	Number of separate unions	Number of members (^{'000})	Annual increase in membership (percent) (b)
1970	119	74.1	5.1	1976	120	85.5	- 0.6
1971	115	75.9	2.4	1977	122	90.2	5.5
1972	112	81.0	6.7	1978	123	88.9	- 1.4
1973	118	84.0	3.7	1979	r 121	r 88.2	r -0.9
1974	123	89.0	6.0	1980	r 122	88.4	r -0.2
1975	122	86.0	- 3.4	1981	123	89.8	1.6

(a) Figures for the period 1968 to 1978 have been revised.

(b) Over preceding year.

PRICES

Retail Prices and Price Indexes

Retail Price Index Numbers from 1901

Retail prices of food and groceries and average rentals of houses for periods extending back to the year 1901 were collected by the Australian Statistician. A continuous price

series from 1901 to the present day (shown in part below) has been constructed from the various indexes in use during this period to provide a *broad indication* of long-term trends in retail price levels for Australia. The index numbers are derived by linking a number of indexes that differ greatly in scope. The successive indexes used are 1901-1914, the 'A' Series; from 1914 to 1946-47, the 'C' Series; from 1946-47 to 1948-49, a composite of Consumer Price Index Housing Group (partly estimated) and 'C' Series excluding rent; and from 1948-49, the Consumer Price Index:

Retail Price Index Numbers from 1901: Six State Capital Cities Combined
(Base: Year 1911 = 100)

Year	Index number	Percent-age change (a)	Year	Index number	Percent-age change (a)	Year	Index number	Percent-age change (a)
1901	88	..	1946	190	+ 1.6	1975 (c)	954	+15.1
1911	100	+ 3.1	1951	313	+19.5	1976 (c)	1 083	+13.5
1921 (b)	168	-13.0	1956	419	+ 6.3	1977	1 216	+12.3
1926	168	+ 1.8	1961	471	+ 2.6	1978 (c)	1 312	+ 7.9
1931	145	-10.5	1966	517	+ 3.0	1979 (c)	1 431	+ 9.1
1936	141	+ 2.2	1971	621	+ 6.0	1980	1 578	+10.3
1941	167	+ 5.0	1974	829	+15.1	1981	1 731	+ 9.7

(a) Over previous year (previous year's figures not necessarily shown in table).

(b) November; remaining figures are averages for the respective years.

(c) Affected by changes in the financing of health services.

Consumer Price Index

The Consumer Price Index (CPI) measures quarterly changes in the price of a constant 'basket' of goods and services which account for a high proportion of expenditures by metropolitan wage and salary households. The CPI is described as a chain of 'fixed weight aggregative' linked indexes. Significant changes in the weighting pattern have been made at approximately five-yearly intervals to take account of changes in household spending patterns. However, during each period between links the range of items included and their quantity weights remain fixed (i.e. the 'quantity' for each type of item included in the 'basket' for calculation of the CPI does not change between linking dates)—base-weighted indexes of this type are referred to as Laspeyre's indexes. The percentage contributions of items to the CPI (often described as 'value weights') change continually from quarter to quarter because of relative price movements which tend to differ from one item to another. The next table shows the percentage contributions of the various groups and sub-groups to the CPI as at the March quarter 1982, when the (current) tenth linked series was introduced, and as at the June quarter 1982.

Consumer Price Index, Hobart, Combined Percentage Contributions to the Total Index
Aggregate (a)

Group, Sub-group, etc.	As at March quarter 1982		As at June quarter 1982	
	Sub-group etc.	Group	Sub-group, etc.	Group
Food—				
Dairy produce	1.930		1.928	
Cereal products	2.116		2.125	
Meat and seafoods—Meat	4.620		4.638	
Fish	0.340		0.337	
Fruit and vegetables—Fresh fruit and vegetables	1.308	21.22	1.227	21.20
Processed fruit and vegetables ...	0.971		0.960	

<i>Group, Sub-group, etc.</i>	<i>As at March quarter 1982</i>		<i>As at June quarter 1982</i>	
	<i>Sub-group etc.</i>	<i>Group</i>	<i>Sub-group, etc.</i>	<i>Group</i>
Soft drinks, icecream and confectionery	2.779		2.813	
Meals out, take away food—Meals out	2.633		2.658	
Snacks, take away food ..	2.468		2.462	
Other food	2.053		2.049	
Clothing—				
Men's and boys' clothing—Mens clothing	2.359		2.399	
Boys clothing	0.695		0.695	
Women's and girls' clothing—Women's clothing	3.490		3.511	
Girls' clothing	0.635		0.645	
Piecegoods and other clothing	0.443	9.67	0.438	9.73
Footwear—Men's footwear	0.534		0.530	
Women's footwear	0.744		0.750	
Children's footwear	0.287		0.271	
Clothing and footwear services	0.482		0.487	
Housing—				
Rent—Privately owned dwellings	2.685		2.701	
Government owned dwellings	0.390		0.383	
Home ownership—Local government rates and charges	1.670	12.12	1.639	12.21
House price	5.248		5.270	
Repairs and maintenance	2.127		2.221	
Household equipment and operation—				
Fuel and light—Electricity	2.150		2.111	
Gas	0.097		0.097	
Other fuel	0.502		0.512	
Furniture and floor coverings	2.351		2.390	
Appliances	1.196	13.29	1.185	13.26
Drapery	1.035		1.023	
Household utensils and tools—Household utensils	1.063		1.036	
Tools	0.374		0.367	
Household supplies and services	3.245		3.262	
Postal and telephone services—Postal charges	0.240		0.257	
Telephone charges	1.034		1.015	
Transportation—				
Private transport—Motor vehicle purchase	4.283		4.213	
Motor vehicle operation	10.146	15.31	10.259	15.34
Public transport fares	0.882		0.865	
Tobacco and alcohol—				
Alcoholic beverages—Beer	4.652		4.613	
Wine	0.859	8.65	0.866	8.62
Spirits	0.662		0.652	
Cigarettes and tobacco	2.474		2.487	
Health and personal care—				
Health services—Hospital and medical	5.027		4.946	
Dental	0.322	8.06	0.319	7.99
Personal care products	1.911		1.916	
Personal care services	0.800		0.810	
Recreation and education—				
Books, newspapers, magazines	1.410		1.460	
Other recreation goods	2.407		2.384	
Holiday accommodation	4.966	11.69	4.887	11.66
Other recreation services	1.822		1.848	
Education and child care	1.083		1.083	
Total	100.000	100.00	100.000	100.00

(a) Percentage contributions shown are based on estimates of household expenditure for the year 1979-80, valued at March quarter 1982 and June quarter 1982, prices respectively.

Consumer Price Index: Hobart (a)
(Base of Each Index: Year 1980-81 = 100.0) (b)—continued

<i>Year or quarter</i>	<i>Food</i>	<i>Clothing</i>	<i>Housing</i>	<i>Household equipment and operation</i>	<i>Transportation</i>	<i>Tobacco and alcohol</i>	<i>Health and personal care</i>	<i>Recreation and education (d)</i>	<i>All groups</i>
1981-82	108.7	106.4	107.4	110.0	112.8	109.1	120.5	n.a.	110.0
1981—									
March	100.6	100.1	101.1	101.7	101.1	100.7	101.3	n.a.	101.0
June	102.7	103.5	102.3	102.4	105.5	103.0	102.7	n.a.	103.2
September ..	106.1	104.1	103.9	104.5	109.3	105.0	103.6	n.a.	105.7
December ...	108.9	106.0	106.7	108.7	111.4	110.0	124.5	n.a.	109.7
1982—									
March	108.9	106.5	108.1	112.4	114.1	109.9	126.3	100.0	111.3
June	110.8	109.1	111.0	114.2	116.4	111.6	127.6	101.7	113.4

Percentage Change: June Quarter 1982 over June Quarter 1981

+ 7.9	+ 5.4	+ 8.5	+ 11.5	+ 10.3	+ 8.3	+ 24.2	n.a.	+ 9.9
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(a) Figures after the decimal point have limited significance; they are inserted to avoid the distortions that would occur in rounding.

(b) Except 'Recreation and education'. (March quarter 1982 = 100.0).

(c) The 'Health and personal care' and 'All groups' indexes were affected by changes in the financing of health services.

(d) There are significant differences in the composition of the old 'Recreation' group and the new 'Recreation and education' group. Therefore these two series have not been linked at March quarter 1982.

The following table shows the 'All groups' index number for Hobart, quarter by quarter, and also as averages for financial years:

Consumer Price Index: All Groups Index Numbers, Hobart (a)
(Base of Index: Year 1980-81 = 100.0)

<i>Year</i>	<i>Quarter ending—</i>				<i>Average for year</i>	
	<i>September</i>	<i>December</i>	<i>March</i>	<i>June</i>	<i>Index</i>	<i>Percentage change (b)</i>
1976-77	66.3	70.0	71.4	73.1	70.2	+ 14.5
1977-78	74.8	76.8	77.7	79.2	77.1	+ 9.8
1978-79	80.4	82.1	83.9	86.1	83.1	+ 7.8
1979-80	88.2	90.7	92.6	94.8	91.6	+ 10.2
1980-81	97.0	98.7	101.0	103.2	100.0	+ 9.2
1981-82	105.7	109.7	111.3	113.4	110.0	+ 10.0

(a) Figures after decimal point have limited significance. They are inserted to avoid the distortions that would occur in rounding.

(b) Over preceding year.

(c) See footnote (c) to the previous table.

Consumer Price Indexes: Capital Cities

Six Capital Cities: A consumer price index series is constructed for each state capital city. These indexes measure price movements in each city individually (but do not provide a basis for the comparison of the retail price level in one city with that in any other city). The six capital cities Consumer Price Index is derived as the weighted average of the

indexes for the individual cities, the basis of weighting being their populations as recorded at successive censuses.

The next table summarises index numbers and percentage changes for the 'All groups' Consumer Price Index for the six capital cities combined:

Consumer Price Index: All Groups
Australia—Six State Capital Cities (a): Summary
 (Base of Index: Year 1980-81 = 100.0)

Quarter	Quarter		Percentage change from same quarter of preceding year	Calendar year (b)		Fiscal year (b)	
	Index number	Percentage change (c)		Index number	Percentage change (c)	Index number	Percentage change (c)
1976—							
September	65.9	+ 2.3	+ 14.0	65.7	(d) + 13.5		
December (d) ..	69.8	+ 5.9	+ 14.4	(1976)			
1977—						70.1	(d) + 14.0
March	71.4	+ 2.3	+ 13.7	(d)		(1976-77)	
June	73.1	+ 2.4	+ 13.1	73.8		(d)	
September	74.5	+ 1.9	+ 13.1	(1977)	+ 12.3		
December	76.3	+ 2.4	+ 9.3				
1978—						76.7	+ 9.4
March	77.3	+ 1.3	+ 8.3			(1977-78)	
June	78.8	+ 1.9	+ 7.8	79.7	(d) + 8.0		
September	80.4	+ 2.0	+ 7.9	(1978)			
December	82.2	+ 2.2	+ 7.7	(d)			
1979—						83.0	(d) + 8.2
March	83.6	+ 1.7	+ 8.2			(1978-79)	
June	85.8	+ 2.6	+ 8.9	86.9	(d) + 9.0	(d)	
September	87.8	+ 2.3	+ 9.2	(1979)			
December (d) ..	90.4	+ 3.0	+ 10.0	(d)			
1980—						91.4	(d) 4P 10.1
March	92.4	+ 2.2	+ 10.5			(1979-80)	
June	95.0	+ 2.8	+ 10.7	94.8	+ 10.2	(d)	
September	96.8	+ 1.9	+ 10.3	(1980)			
December	98.8	+ 2.1	+ 8.3				
1981—						100.0	+ 9.4
March	101.1	+ 2.3	+ 9.6			(1980-81)	
June	103.4	+ 2.3	+ 8.3	105.0	+ 9.6		
September	105.5	+ 2.0	+ 9.0	(1981)			
December	109.9	+ 4.2	+ 11.2				
1982—						110.4	+ 10.4
March	111.8	+ 1.7	+ 10.6			(1981-82)	
June	114.5	+ 2.4	+ 10.7				

(a) Weighted average of six state capital cities combined.

(b) Calendar year and fiscal year index numbers are averages of the four respective quarterly index numbers.

(c) Over preceding period (year or quarter).

(d) Affected by changes in the financing of health services.

The next table includes details for the 'All groups excluding hospital and medical services' index. This facilitates the analysis of trends in retail prices by excluding the effects of the unusual changes in hospital and medical services for the September and December quarters of 1975 (following the introduction of Medibank), for the December quarter 1976 (following changes to Medibank), and for the December quarters of 1978 and 1979 (following changes in the financing of health services).

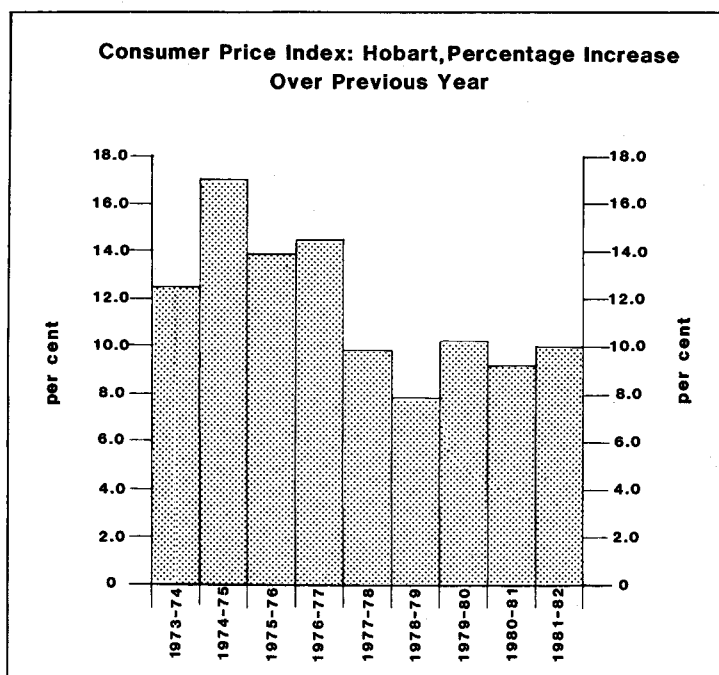
Consumer Price Index, Six State Capital Cities, Australia (a)
All Groups and All Groups Excluding Hospital and Medical Services

Quarter	All groups				All groups excluding hospital and medical services			
	Index number	Percentage increase over preceding quarter	Equivalent annual rate (b) (per cent)	Percentage increase over same quarter of previous year	Index number	Percentage increase over preceding year	Equivalent annual rate (b) (per cent)	Percentage increase over same quarter of previous year
1978—								
March	77.3	1.3	5.3	8.3	76.5	1.2	4.9	8.4
June	78.8	1.9	7.8	7.8	77.9	1.8	7.4	7.7
September ..	80.4	2.0	8.2	7.9	79.4	1.9	7.8	7.6
nDecember ... (c)	82.2	(c) 2.2	(c) 9.1	(c) 7.7	82.4	3.8	16.1	9.0
1979—								
March	83.6	1.7	7.0	(c) 8.2	83.8	1.7	7.0	9.5
June	85.8	2.6	10.8	(c) 8.9	86.1	2.7	11.2	10.5
September ..	87.8	2.3	9.5	(c) 9.2	88.1	2.3	9.5	11.0
December ... (c)	90.4	(c) 3.0	(c) 2.6	(c) 10.0	90.2	2.4	10.0	9.5
1980—								
March	92.4	2.2	9.1	(c) 10.5	92.2	2.2	9.1	10.0
June	95.0	2.8	11.7	(c) 10.7	94.9	2.9	12.1	10.2
September ..	96.8	1.9	7.8	10.3	96.7	1.9	7.8	9.8
December ...	98.8	2.1	8.7	9.3	98.8	2.2	9.1	9.5
1981—								
March	101.1	2.3	9.5	9.4	101.2	2.4	10.0	9.8
June	103.4	2.3	9.5	8.8	103.4	2.2	9.1	9.0
September ..	105.5	2.0	8.2	9.0	105.7	2.2	9.1	9.3
December ...	109.9	4.2	17.9	11.2	108.8	2.9	12.1	10.1
1982—								
March	111.8	1.7	7.0	10.6	110.6	1.7	7.0	9.3
June	114.5	2.4	10.0	10.7	113.3	2.4	10.0	9.6

(a) Weighted average of the six state capitals combined. Base year 1980-81.

(b) Quarterly rate compounded over four quarters, e.g. 4.0 per cent per quarter is equivalent to 17.0 per cent p.a. ($1.04 \times 1.04 \times 1.04 \times 1.04 = 1.17$).

(c) Affected by changes in the financing of health services.



Consumer (Retail) Price Indexes, Various Countries

The following table shows consumer (retail) price indexes for selected countries. It should be noted that the items priced and the weighting patterns used in constructing the indexes vary widely from country to country.

Consumer (Retail) Price Indexes: Various Countries (a)
(Source: Monthly Bulletin of Statistics of the Statistical Office of the United Nations)

Year	Australia (b)	France	Federal Repub. of Germany	Italy	Japan	New Zealand	Switz- erland	United King- dom	USA
Index Numbers (Base of each index: Year 1970 = 100.0)									
1975	162.8	152.8	134.7	171.1	172.4	162.8	144.8	184.4	138.6
1976	184.9	166.9	140.4	199.8	188.4	190.3	147.3	214.9	146.6
1977	207.6	183.2	145.6	236.6	203.6	217.7	149.2	249.0	156.1
1978	224.0	199.8	149.6	265.3	211.4	243.7	150.8	269.6	167.9
1979	244.3	220.8	155.8	304.5	219.0	277.2	156.2	305.8	187.2
1980	269.2	251.3	164.3	369.1	236.6	324.6	162.5	360.8	212.4
1981	295.3	285.0	174.0	441.1	248.0	374.7	173.1	403.6	234.1
Percentage Increase Over Previous Year									
1975	15.1	11.8	6.0	17.0	11.9	14.6	6.7	24.3	9.1
1976	13.6	9.2	4.2	16.8	9.3	16.9	1.7	16.5	5.8
1977	12.3	9.8	3.7	18.4	8.1	14.4	1.3	15.9	6.5
1978	7.9	9.1	2.7	12.1	3.8	11.9	1.1	8.3	7.6
1979	9.1	10.5	4.1	14.8	3.6	13.7	3.6	13.4	11.5
1980	10.2	13.8	5.5	21.2	8.0	17.1	4.0	18.0	13.5
1981	9.7	13.4	5.9	19.5	4.8	15.4	6.5	11.9	10.2

(a) The items priced and the levels at which they are priced in these indexes vary widely from country to country.

(b) Consumer Price Index converted to base: year 1970 = 100.0.

Average Prices of Foodstuffs, Hobart

The average retail prices of selected foodstuffs in Hobart since 1975 are shown in the next table. The list, while representative of foodstuffs commonly consumed, is not exhaustive. For a description of foodstuffs in the Consumer Price Index regimen, see the earlier table 'Consumer Price Index, Percentage Contributions of the Total Index Aggregate'.

Average Retail Prices of Selected Food Items: Hobart (a)
(Cents)

Item	Unit	1977	1978	1979	1980	1981	
						Average price	Percentage increase (b)
Groceries, etc.—							
Bread, ordinary							
white, sliced (d)	680 g	48.8	52.0	57.0	63.8	72.0	12.9
Flour, self-raising	1 kg	50.9	53.3	55.0	59.8	66.3	10.9
Tea	250 g	92.3	88.5	79.5	77.3	79.5	2.8
Coffee, instant	150 g	283.2	284.0	270.0	299.0	299.3	0.1
Sugar	2 kg	63.5	68.8	85.3	95.3	102.0	7.0
Rice	500 g	35.5	37.8	39.3	38.0	40.0	5.3
Breakfast cereal,							
corn based	500 g	71.5	75.3	82.3	88.8	100.0	12.6
Peaches, canned	825 g	70.0	71.3	75.8	80.0	86.5	8.1
Potatoes	1 kg	26.6	35.8	39.5	45.0	51.5	14.4
Onions	1 kg	47.3	47.3	53.0	52.5	114.0	117.1

continued next page

Average Retail Prices of Selected Food Items: Hobart (a)
(Cents)—continued

Item	Unit	1977	1978	1979	1980	1981	
						Average price	Percentage increase (b)
Dairy produce, etc.—							
Butter	500 g	91.5	91.3	94.8	104.8	119.0	13.5
Cheese, processed	500 g	108.0	114.6	118.0	135.6	144.0	6.2
Margarine, table, poly-unsaturated	500 g	84.9	84.0	92.0	93.0	101.5	9.1
Eggs	1 doz (55g)	123.4	128.5	138.5	147.5	161.3	9.4
Bacon, rashers, pre-pack	250 g	123.0	126.5	149.5	170.5	182.5	7.0
Milk, fresh, bottled, delivered	2—600 ml	40.5	47.0	49.3	54.0	64.3	19.1
Meat—							
Beef—							
Rump steak	1 kg	354.7	391.5	580.0	659.8	666.0	0.9
Silverside, corned ...	1 kg	218.7	247.5	379.5	441.8	447.5	1.3
Lamb—							
Leg	1 kg	238.9	269.8	332.8	357.5	357.5	—
Loin chops	1 kg	240.0	277.8	349.3	371.0	378.0	2.1
Pork, leg	1 kg	326.1	344.5	415.3	464.0	490.3	5.7

(a) The table units are not necessarily those for which the original price data were obtained; in such cases, prices have been calculated for the table unit.

(b) Over the corresponding average 1978 price.

(c) Average price for six months only.

(d) From June quarter 1979, supermarket sales only.

Indexes of Relative Retail Prices of Food

The table below shows indexes of relative retail prices of food for the six state capitals, Canberra and Darwin, and for selected Tasmanian towns, as at March, for recent years. The indexes for each year are expressed to the base: weighted average of the six state capitals = 100. For a particular year, they show comparative retail prices based on the same selected 'basket' of food and grocery items and the same weighting pattern for each locality. The items priced for calculation of the indexes are generally those priced for the Monthly Food Index for March of the Consumer Price Index of the same year but excluding snacks and take-away foods (the annual *Indexes of Retail Prices of Food in Queensland Towns* (6401.3) published by the Queensland office of the Bureau lists the food items included for the year to which it relates). The indexes compare relative retail prices of food in various localities at each point in time; they do not show movement over time in each locality. Priced data used for derivation of the indexes has been collected in special surveys of retail prices undertaken in March each year.

Index Numbers of Relative Retail Prices of Food Items (a)
(Base: weighted average of the six state capitals at each point of time = 100)

	At March							
	1975	1976	1977	1978	1979	1980	1981	1982
Sydney	102	101	99	98	99	99	100	100
Melbourne	97	98	99	99	100	99	98	99
Brisbane	100	101	101	101	100	101	101	101
Adelaide	101	102	103	102	103	102	103	103
Perth	103	101	102	105	103	101	99	100
Hobart	102	104	106	106	104	104	104	105

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Index Numbers of Relative Retail Prices of Food Items (a)
 (Base: weighted average of the six state capitals at each point of time = 100)—continued

	At March							
	1975	1976	1977	1978	1979	1980	1981	1982
Hobart	102	104	106	106	104	104	104	105
Canberra	104	105	105	103	104	102	103	102
Darwin	120	121	105	115	111	114	116	115
Launceston	97	100	n.a.	102	103	104	103	104
Devonport	97	101		103	104	105	105	105
Burnie	97	101		104	102	103	103	104
Queenstown	108	108		111	107	107	109	107

(a) These indexes compare retail prices between various localities of a selected 'basket' of food items at each point in time. They do not show movement over time in each locality.

The indexes are subject to the following limitations:

- (i) As the indexes are compiled by pricing, in each town or city, the same list of major food items, specified as to quantity and as far as possible as to quality, the comparisons measure relative retail prices only for the field covered by the selected items as combined by a common set of weights. They cannot be considered as reflecting relative prices in other fields of expenditure. A common list of items or 'basket' such as this *does not reflect differences in living costs which result directly from differences in modes of living*, e.g. as reflected by climate and availability of items, etc., or levels of living between localities. Users of these indexes should bear in mind that the degree of appropriateness of the items and weights used would vary from centre to centre, and that the differences in price levels as indicated by the indexes should be regarded as approximations only.
- (ii) In some instances, the relationship between towns in March of one year may differ from that existing between them at another date during that year or in other years, because seasonal influences on prices of some items, e.g. potatoes and meat, may occur at different times in different localities. In these circumstances *it is desirable to study the run of index numbers for a number of years.*

Wholesale Price Indexes

General

The Bureau compiles several wholesale price indexes of basic materials. These include the 'Price Index of Materials used in House Building' and the 'Price Index of Materials used in Building other than House Building'. The *Price Index of Materials Used in the Manufacturing Industry* (for Australia) was first published by the Bureau in July 1975 and the *Price Index of Articles Produced by Manufacturing Industry* in October 1976.

Wholesale Price Index of Materials Used in House Building

General: This index is complementary to the 'Other than House Building' index and measures the change in prices of selected materials used in house construction.

Scope and Composition: The materials selected and weights given to the items were in accordance with the usage of materials in a sample of representative house types constructed in or about 1968-69. The house types included in the sample were those using brick, brick veneer, timber or asbestos-cement sheeting for the outer-walls. Within the four major construction types account was taken of a range of characteristics, e.g. material used for internal partitions, window frames, roofs, etc. The number of items included in the index range from 49 (Brisbane) to 51 (Perth). The items are combined into 11 groups; an 'All groups' index is also published. Standards are fixed and price movements are for items of a constant quality.

Derivation of Items and Weights: The index is a fixed quantity weights index and is calculated by the method known as the 'weighted arithmetic mean of price relatives'. The items and weights used are based on the reported values of materials used in the selected houses in each state capital city urban area. Information about materials used and their value was obtained for a total of 114 houses. The material values derived for each state capital city were then used to develop weighting patterns for the individual cities and aggregated to give a weighting pattern for the six state capital cities combined.

Base Period: The index has a base year 1966-67 = 100.0 but the weighting pattern is more appropriate to material usage during 1968-69.

Prices: Prices relate to specified standards for each commodity and are obtained in all state capital city urban areas from representative suppliers of materials used in house building. The prices are collected as at the mid-point of the month to which the index refers.

Index Numbers: The index has been compiled for each month from July 1966 and for financial years from 1966-67. Index numbers are published for each group and combined into an 'All groups' number for each state capital city and the six state capital cities combined.

The following table compares movements in the index numbers for each of the six capital cities and six capitals combined for recent years. (The separate city indexes allow comparisons to be drawn between capital city areas as to differences in the degree of price movement from period to period, but not as to differences in price levels.)

Price Index of Materials Used in House Building
All Groups Index Numbers: Six State Capital Cities
(Base of Each Index: Year 1966-67 = 100.0)

Year or month	State capital cities						Six capitals (a)	
	Sydney	Mel- bourne	Brisbane	Adelaide	Perth	Hobart	Index number	Percent- age change (b)
1976-77	234.5	223.6	243.5	250.7	229.8	235.1	232.9	+ 11.9
1977-78	254.0	238.6	265.1	270.7	253.4	256.7	252.0	+ 8.2
1978-79	272.7	251.4	281.3	292.1	268.2	273.6	268.1	+ 6.4
1979-80	309.5	283.4	315.0	338.5	299.4	304.2	302.9	+ 13.0
1980-81 (r)	347.6	324.7	363.7	386.1	337.6	338.2	344.0	+ 13.6
1981-82	378.5	355.1	407.2	427.2	373.2	371.7	377.9	+ 9.9
1981—								
March	353.8	331.3	374.8	395.1	344.1	347.6	351.2	+ 3.1
June	361.0	336.2	380.8	401.3	348.5	353.0	357.0	+ 1.7
September	366.7	342.1	391.9	410.8	360.7	356.6	364.8	+ 2.2
December	373.2	349.6	398.0	420.5	369.2	365.2	372.1	+ 2.0
1982—								
March	389.1	364.3	423.5	441.5	386.5	385.0	389.5	+ 4.7
June	395.9	375.8	430.2	456.3	393.3	394.4	398.5	+ 2.3
Percentage Change June 1982 Over June 1981								
	+ 9.7	+ 11.8	+ 13.0	+ 13.7	+ 12.9	+ 11.7	+ 11.6	—

(a) Weighted average of six state capital cities.

(b) Over preceding year or preceding month shown.

Index numbers for the Hobart capital city urban area for each group of items are given in the next table:

Price Index of Materials Used in House Building
Group Index Numbers: Hobart
 (Base of each Index: Year 1966-67 = 100.0)

<i>Year or month</i>	<i>Concrete mix, cement and sand</i>	<i>Cement products</i>	<i>Clay bricks, tiles, etc.</i>	<i>Timber, board and joinery</i>	<i>Steel products</i>	<i>Other metal products</i>	
Value weight (a)	7.25%	7.01%	10.14%	38.15%	7.49%	7.93%	
1974-75	157.6	178.6	201.0	192.5	188.7	160.2	
1975-76	184.9	205.9	244.0	226.6	224.2	181.8	
1976-77	205.0	231.6	272.1	257.4	254.7	201.4	
1977-78	219.5	253.0	306.4	282.3	279.2	218.4	
1978-79	227.3	278.6	326.6	300.7	297.9	231.9	
1979-80	246.9	309.5	354.2	337.1	329.1	271.4	
1980-81	266.0	343.5	376.2	377.8	380.6	304.0	
1981-82	285.9	385.6	409.7	414.5	423.1	334.0	
1981—							
March	270.9	343.2	388.0	391.3	387.9	308.2	
June	272.3	367.7	394.3	393.7	399.7	317.1	
September	279.8	374.0	397.2	393.8	410.1	321.0	
December	283.1	379.6	405.7	404.7	414.8	326.4	
1982—							
March	287.5	389.0	424.5	432.7	436.7	349.8	
June	303.5	410.1	429.4	441.9	448.2	352.3	
<i>Percentage Change June 1982 Over June 1981</i>							
	+ 11.5	+ 11.5	+ 8.9	+ 12.2	+ 12.1	+ 11.1	
<i>Year or month</i>	<i>Plumbing fixtures, etc.</i>	<i>Electrical installation materials</i>	<i>Installed appliances</i>	<i>Plaster and plaster products</i>	<i>Miscellaneous materials</i>	<i>All groups</i>	
						<i>Index number</i>	<i>Percentage change (b)</i>
Value weights (a) ...	2.74%	1.61%	6.98%	4.99%	5.71%	100.00%	—
1976-77	228.2	191.8	148.0	202.2	234.0	235.1	+ 12.4
1977-78	247.4	201.2	154.9	218.2	250.8	256.7	+ 9.2
1978-79	258.5	224.5	161.6	229.6	273.5	273.6	+ 6.6
1979-80	293.5	265.3	169.5	244.7	307.0	304.2	+ 11.2
1980-81	337.0	296.8	181.2	265.3	350.4	338.2	+ 11.2
1981-82	373.4	325.7	190.6	311.3	382.1	371.7	+ 9.9
1981—							
March	348.8	299.4	184.5	274.0	365.8	347.6	+ 4.0
June	352.5	304.4	185.6	274.0	367.9	353.0	+ 1.6
September	365.1	313.9	185.8	285.2	371.2	356.6	+ 1.0
December	365.5	319.0	189.6	312.8	378.8	365.2	+ 2.4
1982—							
March	385.1	340.4	191.3	335.9	388.8	385.0	+ 5.4
June	391.0	346.6	200.3	335.9	403.1	394.4	+ 2.4
<i>Percentage Change June 1982 Over June 1981</i>							
	+ 10.9	+ 13.9	+ 7.9	+ 22.6	+ 9.6	+ 11.7	..

(a) Composition and weighting pattern as at reference base year.

(b) Over preceding year or preceding month shown.

Price Index of Materials Used in Building Other Than House Building

General: The index measures changes in the prices of selected materials used in the construction of buildings other than houses and 'low-rise' flats (in general, those up to three storeys). The original index had a reference base as the year 1966-67 = 100.0. This has been replaced with the publication in March 1981 of a revised index with a reference base as the year 1979-80 = 100.0.

Prices: Price series used relate to specified standards of each commodity and are obtained in all state capital city urban areas from representative supplies of materials used in building. The prices are collected as at the mid-point of the month to which the index refers, or as near thereto as practicable. There are some exceptions to the use of local prices in the indexes for each capital city area. In a few cases where suitable price series are not currently available for an item in a given city, imputation is necessary. For each capital city area, the whole of the group 'electrical installation materials' and the majority of the items in the group 'mechanical services components' were based on Sydney and Melbourne price series for the compilation of the original index. In the revised index, certain commodities that comprise the group 'electrical materials' are now priced in Hobart.

Original Price Index: The reference base of the index is the year 1966-67 = 100.0. The index was a fixed quantity weights index calculated by the method known as the 'weighted arithmetic mean of price relatives'.

The composition of the index was in accordance with actual material usage in building projects which were selected as being representative for purposes of determining weighting patterns. The index comprises 72 items combined into 11 groups. Items were described in terms of fixed specifications with the aim of recording price changes for representative materials of constant quality.

Revised Price Index: A review of the *Price Index of Materials Used in Building Other Than House Building* was completed in March 1981 with publication of index numbers compiled on a monthly basis from July 1979. The reference base of the revised index is the year 1979-80 = 100.0. The revised index is also a fixed quantity weights index and is calculated by the method known as the 'weighted arithmetic mean of price relatives'.

The composition of the index is in accordance with the estimated average values of materials used in the construction of buildings (other than houses) commenced in the six state capital cities in the three years ended June 1977. The index comprises 68 items combined in 10 industry of origin groups in addition to an 'all groups' index. Items are described in terms of fixed specifications with the aim of recording price changes for representative materials of constant quality.

The following table compares movements in the 'all groups' index numbers for each of the six state capital cities and the six capitals combined.

Price Index of Materials Used in Building Other Than House Building

All Groups Index Numbers:

Six State Capital Cities

(Base of each Index: Year 1979-80 = 100.0)

Year or month	State capital cities						Six capitals (a)	
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Index Number	Percentage change (b)
1979-80	100.0	100.0	100.0	100.0	100.0	100.0	100.0	+ 13.0
1980-81	113.1	112.7	113.2	113.8	112.2	111.6	112.9	+ 12.9
1981-82	126.6	123.6	126.3	127.4	123.8	122.9	125.4	+ 11.1

Price Index of Materials Used in Building Other Than House Building
All Groups Index Numbers:
Six State Capital Cities
 (Base of each Index: Year 1979-80 = 100.0)—continued

Year or month	State capital cities						Six capitals (a)	
	Sydney	Mel-bourne	Brisbane	Adelaide	Perth	Hobart	Index Number	Per-centage change (b)
1981—								
March	115.4	114.7	115.7	116.4	114.2	113.9	115.2	+ 3.0
June	118.3	117.1	118.0	119.0	116.5	116.4	117.8	+ 2.3
September	121.5	119.4	121.1	122.1	119.1	118.7	120.6	+ 2.4
December	124.0	121.1	123.5	124.1	122.0	120.7	122.8	+ 1.8
1982—								
March	131.4	127.4	130.9	132.3	127.9	126.8	129.8	+ 5.7
June	134.8	131.4	135.3	136.4	132.8	130.8	133.8	+ 3.1
Percentage Change June 1982 Over June 1981								
	+ 13.9	+ 12.2	+ 14.7	+ 14.6	+ 14.0	+ 12.4	+ 13.6	

(a) Weighted average of six state capital cities.

(b) Over preceding year or previous month shown.

The separate city index numbers measure price movements within each metropolitan area individually and do not allow comparison of absolute price levels.

Index numbers are also compiled for the Hobart area for selected materials and for special combinations of materials. These are shown in the following tables.

Price Index of Materials Used in Building Other Than House Building
Selected Major Building Material Index Numbers, Hobart
 (Base of Each Index: Year 1979-80 = 100.0)

Year or month	Structural timber	Clay bricks	Ready mixed concrete	Precast concrete products	Galvanised steel decking cladding etc	Structural steel	Reinforcing steel bar, fabric and mesh
1979-80	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1980-81	113.9	104.7	107.2	113.0	113.1	110.8	114.4
1981-82	123.2	119.0	113.9	137.7	128.6	122.1	125.6
1981—							
March	118.1	110.3	109.4	115.2	115.1	113.0	115.8
June	118.1	114.3	109.2	123.3	118.5	117.0	118.3
September	118.1	113.8	111.4	130.7	123.8	118.5	121.0
December	120.6	117.3	112.5	135.2	126.9	118.4	122.8
1982—							
March	129.0	125.9	113.9	146.3	132.0	126.5	130.2
June	129.0	128.8	121.5	149.4	135.0	130.1	135.1
Percentage Change June 1982 Over June 1981							
	+ 9.2	+ 12.7	+ 11.3	+ 21.2	+ 13.9	+ 11.2	+ 14.2
Year or month	Aluminium windows	Steel windows, doors, louvres, etc.	Builders' hardware	Sand, aggregate and filling	Carpet	Paint	Non-ferrous pipes
1979-80	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1980-81	116.1	117.2	117.2	108.3	116.1	117.7	98.9
1981-82	123.6	133.0	128.5	113.4	126.5	125.0	97.8

Price Index of Materials Used in Building Other Than House Building
Selected Major Building Material Index Numbers, Hobart
 (Base of Each Index: Year 1979-80 = 100.0)—*continued*

<i>Year or month</i>	<i>Aluminum windows</i>	<i>Steel windows, doors, louvres, etc.</i>	<i>Builders' hardware</i>	<i>Sand, aggregate and filling</i>	<i>Carpet</i>	<i>Paint</i>	<i>Non-ferrous pipes</i>
<i>Percentage Change June 1982 Over June 1981</i>							
1981—							
March	116.9	119.0	119.8	108.2	119.9	120.7	98.1
June	118.4	125.9	121.1	109.6	121.9	121.1	97.4
September	118.8	128.9	123.9	111.2	125.3	121.9	97.2
December	118.8	129.3	126.2	113.1	125.7	121.2	98.1
1982—							
March	131.6	137.6	134.0	113.9	127.8	126.6	98.0
June	132.7	140.2	136.6	117.8	128.8	131.7	98.9
<i>Percentage Change June 1982 Over June 1981</i>							
	+ 12.1	+ 11.4	+ 12.8	+ 7.5	+ 5.7	+ 8.8	+ 1.5

Linking of the original and revised index: The original index and the revised index overlap for the period July 1979 to January 1981. The indexes could therefore be linked at any point of time within this overlap period. A technical note showing a method of linking the revised index groups to previous index groups, so that series from the revised index can be converted to the reference base of the original index is included with the February 1981 edition of *Price Index of Materials Used In Building Other Than House Building* (Catalogue No. 6407.0) which is available upon request.

Price Index of Materials Used in Building Other Than House Building
Special Combinations of Building Materials Index Numbers, Hobart
 (Base of Each Index: Year 1979-80 = 100.0)

<i>Year or month</i>	<i>All electrical materials</i>	<i>All mechanical services</i>	<i>All plumbing materials</i>	<i>All groups excluding electrical materials and mechanical services</i>	<i>All groups</i>
1979-80	100.0	100.0	100.0	100.0	100.0
1980-81	110.1	112.8	111.5	111.6	111.6
1981-82	121.7	125.9	120.8	122.5	122.9
1981—					
March	111.0	115.1	113.3	113.9	113.9
June	114.0	118.2	115.4	116.4	116.4
September	117.8	120.9	117.9	118.4	118.7
December	119.7	122.7	119.4	120.4	120.7
1982—					
March	124.7	131.6	123.3	126.1	126.8
June	130.6	135.2	125.8	129.9	130.8
<i>Percentage Change: June 1982 Over June 1981</i>					
	+ 14.6	+ 14.4	+ 9.0	+ 11.6	+ 12.4

Australian Export Price Index

In July 1979, the revised Export Price Index on reference base 1974-75 = 100 was introduced, replacing the previous index which had a reference base of 1959-60 = 100.

The revised index is a fixed weights index and is weighted using the pattern of Australian exports during the three years 1974-75, 1975-76 and 1976-77. It has a more comprehensive coverage of exports than the former index; in particular exports of manufactured goods are covered more fully.

The revised Export Price Index relates to all exports of merchandise from Australia. It includes re-exports of merchandise (that is, goods which are imported into Australia and exported at a later date without physical transformation). The index numbers for each month relate to prices of those exports of merchandise that are physically shipped from Australia during that month.

The commodities directly represented in the index were selected on the basis of their export values in the years 1974-75, 1975-76 and 1976-77. They were allocated weights in accordance with the average value of exports for each commodity over the period 1974-75 to 1976-77. The 1975-76 and 1976-77 export values for each commodity were revalued at 1974-75 prices before averaging.

In general, prices are obtained from major exporters of the selected commodities included in the index. The point of pricing for the Export Price Index is the point at which the goods physically leave Australia, that is prices are on the basis f.o.b. at main Australian ports of export.

As the prices used in the index are expressed in Australian currency, changes in the relative values of the Australian dollar and overseas currencies can have a direct impact on price movements for the many commodities that are sold in currencies other than Australian dollars. Where exports are sold at prices expressed in terms of a foreign currency and forward exchange cover is used, the prices used in the index exclude forward exchange cover.

The price series used relate to specified standards, grades, types, etc. of each commodity with the aim of incorporating in the index price changes for exports of representative goods of constant quality. Wherever possible, prices to predominant export markets are used for each of the specified goods priced, in order to lessen the impact of price variations attributable solely to changes, over time, in market destinations. In most cases prices are combined using fixed weights between markets. Weights between markets are reviewed from time to time and revised where necessary.

Export Price Index Numbers: Australia
(Base of Each Index: Year 1974-75 = 100)

Year or month	Meat and meat prepara- tions	Dairy products and eggs	Fish and fish prepara- tions	Cereals and cereal prepara- tions	Fruit and vege- tables	Sugar and sugar prepara- tions	Hides, skins and furskins raw
1976-77	125	94	185	89	108	83	188
1977-78	154	107	200	81	160	72	198
1978-79	234	113	229	86	167	74	308
1979-80	285	123	230	107	184	95	326
1980-81	274	141	227	121	210	143	231
1981-82	250	164	254	120	211	92	226
1981—							
March	267	142	230	125	213	141	223
June	262	149	238	126	213	131	209
September	253	156	240	122	214	102	209
December	245	164	243	119	213	91	226
1982—							
March	244	170	266	118	203	84	247
June	255	176	284	117	215	82	236

continued next page

Export Price Index Numbers: Australia
(Base of Each Index: Year 1974-75 = 100)—continued

Year or month	Textile fibres and their wastes	Metal- liferous ores and metal scrap	Coal, coke and briquettes	Petroleum, petroleum products and related materials	Animal oils and fats	Manu- facturers of iron and steel	Manu- facturers of non- ferrous metals
1976-77	135	140	164	137	117	91	123
1977-78	139	151	176	141	136	96	125
1978-79	153	157	178	157	157	118	161
1979-80	181	189	180	241	169	145	255
1980-81	190	207	189	290	145	142	210
1981-82	200	231	231	307	139	139	176
1981—							
March	198	209	189	297	137	140	196
June	194	221	214	307	142	140	187
September	200	222	223	302	140	139	190
December	196	223	228	298	140	136	170
1982—							
March	199	235	235	313	138	139	168
June	208	254	256	320	139	142	160

Year or month	Power generating machinery and equipment	Specialised machinery for particular industries	Road vehicles	Gold	All groups	
					Index	Percentage change (a)
1976-77	119	147	130	95	122	+ 11.9
1977-78	139	166	145	120	128	+ 4.9
1978-79	154	178	154	165	144	+ 12.5
1979-80	173	195	166	347	174	+ 20.8
1980-81	194	211	187	408	185	+ 6.3
1981-82	214	234	211	290	187	+ 1.1
1981—						
March	205	213	190	344	185	—
June	205	224	196	334	188	+ 1.1
September	207	228	199	315	186	— 0.5
December	214	230	212	297	184	— 1.1
1982—						
March	217	240	218	258	187	+ 1.6
June	221	246	222	248	195	+ 4.3

(a) Over preceding year or month shown.

Prices Indexes and Inflation

There is no practical means available for *directly and precisely* measuring the rate of inflation, as this would entail regular measurement of both the price and volume of *all* goods and services sold and an ability to take into account constantly changing standards, qualities and types of these goods and services. However, price indexes, although not a true measure of inflation, are often used as giving the best available rough indication of the rate of inflation.

When a rate of inflation is stated for a particular country, the rate of increase in the official retail price index has usually been quoted. However, any such measure actually relates only to purchasing power with respect to the 'basket' of items in the particular index used, combined in their specified proportions. Retail price indexes *do not* measure changes in raw material prices, wholesale prices, industrial plant and equipment costs, etc., and, therefore, cannot be regarded as measuring the trend in the overall internal price structure of an economy (i.e the rate of inflation).

For a more detailed coverage of this topic, see the article under the above heading in the 1976 *Year Book*. The table below shows, for recent years, the varying results

obtained when different price index series are used as a measure of the change in prices and of purchasing power:

Selected Price Indexes: Comparison

Year	Consumer price index (a)		Price index of materials used in—			
	Hobart, all groups	Six state capitals combined, all groups	House building, Hobart (a)	Manufacturing in- dustry Australia (b)		Australian GDP implicit price deflator (c) r
				Imported materials	All groups	
Index Numbers						
1976-77	70.2	70.1	235.1	233.2	182.1	77.6
1977-78	77.1	76.7	256.7	257.0	198.5	83.6
1978-79	83.1	83.0	273.6	275.7	248.8	90.1
1979-80	91.6	91.4	304.2	366.4	321.8	100.0
1980-81	100.0	100.0	338.2	413.0	353.2	109.9
1981-82	110.0	110.4	371.7	435.7	358.8	121.2
Percentage Increase Over Preceding Year						
1976-77	14.5	14.0	12.4	14.9	14.8	11.0
1977-78	9.8	9.4	9.2	10.2	9.0	7.7
1978-79	7.8	8.2	6.6	7.3	25.3	7.8
1979-80	10.2	10.1	11.2	32.9	29.3	11.0
1980-81	9.2	9.4	11.2	12.7	9.8	9.9
1981-82	10.0	10.4	9.9	5.5	1.6	10.3
Price (d) of an Article Worth \$100 in 1976-77 if its Price Increased at the Same Rate as the Respective Price Index (\$)						
1976-77	100.00	100.00	100.00	100.00	100.00	100.00
1977-78	109.83	109.42	109.19	110.21	109.01	107.73
1978-79	118.38	118.40	116.38	118.22	136.63	116.11
1979-80	130.48	130.39	129.39	157.12	176.72	128.87
1980-81	142.45	142.65	143.85	177.10	193.96	141.62
1981-82	156.70	157.49	158.10	186.84	197.03	156.19
Value of a \$1 Note Expressed in Terms of 1976-77 Values if the Respective Price Index is Taken as a Measure of Inflation (\$)						
1976-77	1.00	1.00	1.00	1.00	1.00	1.00
1977-78	0.91	0.91	0.92	0.91	0.92	0.93
1978-79	0.84	0.84	0.86	0.85	0.73	0.86
1979-80	0.77	0.77	0.77	0.64	0.57	0.78
1980-81	0.70	0.70	0.70	0.56	0.52	0.71
1981-82	0.64	0.64	0.63	0.54	0.51	0.64

(a) Base of each index: year 1979-80 = 100.0.

(b) Base of each index: year 1968-69 = 100.0.

(c) Index based on estimates of Australian Gross Domestic Product at current prices and at average 1979-80 prices available in September 1982, not a fixed weights index (see 'Implicit Price Deflators' in the section on Australian National Accounts in Chapter 19).

(d) Average price of the article during a particular year; these figures (rounded) can also be used as the respective indexes to the new base: year 1976-77 = 100.0.

The next table demonstrates the (compounding) effects of a range of constant rates of price increase over a 20-year period. In real life, prices never maintain a constant rate of change and rates of price changes vary widely for different groups of items. Never-

theless, this table is still useful for demonstrating the type of effect that would result from various constant rates of price increase.

The Effect of Various Rates of Price Increase

Number of years from base year	Annual rate of price increase (per cent)					
	5	10	15	20	25	30
<i>Price of an Article Originally Worth \$100 (\$) (a)</i>						
0 (base year)	100.00	100.00	100.00	100.00	100.00	100.00
1	105.00	110.00	115.00	120.00	125.00	130.00
2	110.25	121.00	132.25	144.00	156.25	169.00
3	115.76	133.10	152.09	172.80	195.31	219.70
4	121.55	146.41	174.90	207.36	244.14	285.61
5	127.63	161.05	201.14	248.83	305.18	371.29
10	162.89	259.37	404.56	619.17	931.32	1 378.58
15	207.89	417.72	813.71	1 540.70	2 842.17	5 118.59
20	265.33	672.75	1 636.65	3 833.76	8 673.62	19 004.96

Value of a \$1 Note Expressed in Base Year Dollar Values (\$)

1 .....	.95	.91	.87	.83	.80	.77
2 .....	.91	.83	.76	.69	.64	.59
3 .....	.86	.75	.66	.58	.51	.46
4 .....	.82	.68	.57	.48	.41	.35
5 .....	.78	.62	.50	.40	.33	.27
10 .....	.61	.39	.25	.16	.11	.07
15 .....	.48	.24	.12	.06	.04	.02
20 .....	.38	.15	.06	.03	.01	.01

Percentage Decline in Value of a Dollar Note from Base Year

1	4.8	9.1	13.0	16.7	20.0	23.1
2	9.3	17.4	24.4	30.6	36.0	40.8
3	13.6	24.9	34.2	42.1	48.8	54.5
4	17.7	31.7	42.8	51.8	59.0	65.0
5	21.6	37.9	50.3	59.8	67.2	73.1
10	38.6	61.4	75.2	83.8	89.3	92.7
15	51.9	76.1	87.7	93.5	96.5	98.0
20	62.3	85.1	93.9	97.4	98.8	99.5

(a) These figures could also be regarded as price indexes to the base, year 0 = 100.0.

Calculation of Price Index Series for Particular Purposes

Special purpose index series are often useful. For example, an index of average weekly earnings for Tasmania, base year 1974-75 = 100.0, may be useful in relation to the costs of a large construction program commenced in that year; an office rental rate may be adjusted regularly according to movements in the consumer price index from the date of commencement of the leasing agreement.

Calculation of a special purpose price index series based on unit values (or index numbers) available for a series of years is easily carried out as follows: choose the base year and let the index number for that year equal 100.0; then the index number for any other year equals—

$$\frac{\text{value for that year}}{\text{value for the base year}} \times \frac{100.0}{1}$$

Using a Price Index Series

If the *relevant* price index is available, a *current value* series may be readily adjusted to values at *constant prices* relative to any base year desired, in order to allow a more realistic assessment of trends over time.

For example, the year *n* value, at year *m* constant prices

$$= \frac{\text{current value for year } n}{1} \times \frac{\text{price index for year } m}{\text{price index for year } n}$$

If it was desired to convert a current value of 100m in 1981-82 to constant 1977-78 values based on the Hobart all groups consumer price index (see the last table for index numbers), the calculations would be as follows:

$$\begin{aligned} \text{Value at 1977-78 prices} &= \$100\text{m} \times \frac{77.1}{110.0} \\ &= \$70.1\text{m} \end{aligned}$$

WAGES

The Basic Wage

General

The present position is as follows: wages fixed by Tasmanian State Industrial Boards still consist of two parts, namely a *basic wage* and a *margin*: wages fixed by the Federal Conciliation and Arbitration Commission are expressed as a *total wage*, the basic wage concept having been abolished in federal awards on 1967. All state industrial authorities with the exception of Victoria's have retained the basic wage concept. A more detailed history of the basic wage can be found in the 1970 *Year Book*.

State Basic Wage Rates

The following table shows the awards and determination made by Tasmanian industrial authorities from 1975:

Tasmanian Basic Wage Rates
(\$)

Date of operation (a)	Adult persons	Date of operation (a)	Adult persons
1976 15 February	54.40	1978 28 February	73.50
1976 15 May	58.20	1978 7 June	74.50
1976 15 August	60.70	1978 12 December	77.50
1976 22 November	62.90	1979 27 June	80.00
1977 31 March	68.60	1980 4 January	83.60
1977 24 May	69.90	1980 14 July	87.10
1977 22 August	71.30	1981 9 January	90.30
1977 12 December	72.40	1981 7 May	93.60

(a) Rates operative from the first pay-period commencing on or after the date shown.

Minimum Wages

The Federal Conciliation and Arbitration Commission announced in its decision of 8 July 1966 that it intended to grant relief to low wage earners by inserting a provision prescribing a minimum wage. It ordered that the minimum male wage paid under the Metal Trades Award should be the appropriate basic wage plus \$3.75 a week (e.g. in Tasmania a basic wage of \$33.40 plus \$3.75 giving a minimum wage of \$37.15).

Tasmanian Industrial Boards introduced the concept of the minimum wage into their determinations in June 1967. Weekly minimum wage rates prescribed in federal and State awards for recent years are shown in the following table:

Minimum Wages, Adult Males: Federal and State Awards
(**\$**)

<i>Date operative (a)</i>	<i>Federal awards</i>	<i>Tasmanian State Industrial Boards' determinations</i>
7 June 1978	116.10	117.20
12 December 1978	120.70	121.90
27 June 1979	124.60	125.80
4 January 1980	130.20	131.50
14 July 1980	135.70	137.00
9 January 1981	140.70	142.10
7 May 1981	145.80	147.20
1 November 1982	145.80	168.00

(a) Rates operative from the first pay-period commencing on or after the date shown.

Total Wage Concept

For a full account of events leading to the adoption of a 'total wage' concept see the 1970 *Year Book*. The decision abolishing the basic wage in awards of the Federal Conciliation and Arbitration Commission was handed down in June 1967 when a \$1.00 increase was awarded, to be added to the *total wage*. Results of recent national wage cases prior to the adoption of wage indexation principles in April 1975 follow:

- 1973** The total wage was increased by a combination of a two per cent increase plus a flat increase of \$2.50. The minimum wage was increased by \$9.00 per week.
- 1974** The Arbitration Commission again increased total award rates by a combination of a two per cent increase plus a flat rate increase of \$2.50. The minimum wage was increased by \$8.00 per week.
- 1975** Total wages were increased by 3.6 per cent in line with the movement of the Consumer Price Index during the March quarter 1975. The minimum wage was increased by \$8.00 per week, effective from 1 January 1975, and by a further \$4.00 when trial indexation was introduced.

Total Wage Concept in Tasmania

The Federal award of June 1967 was followed by a test case argued before the Chairman of the State Industrial Boards. The employers asked for adoption of the total wage concept. The unions opposed this and argued for a \$7.30 increase in the basic wage; if a lesser amount was determined, then a *minimum total wage* of \$40.70 should nevertheless be fixed.

The decision in the test case (Electrical Trades) was that both male and female rates should be increased by \$1; the increase, however, should be regarded as *raising the basic wage* which would be retained for the present in State determinations. The State Industrial Boards have retained the basic wage and margins concepts in awards handed down following subsequent national wage case determinations of the Federal Conciliation and Arbitration Commission.

National Wage Case Decisions

The Conciliation and Arbitration Commission began hearing submissions regarding wage indexation subsequent to the publication of the June quarter 1975 Consumer Price Index. Submissions were made by the Federal Government, state governments, tribunals, private employers and trade unions. The Commission also sat to consider whether subsequent increases should be awarded, in line with the principles of wage indexation, following publication of the Consumer Price Index for each quarter. Wage indexation was formally abandoned in July 1981.

The following table shows the increases made by the Conciliation and Arbitration Commission in National Wage Case decisions from August 1976:

General Increases in Award Total Wages: National Wage Cases Decisions

	<i>Date operative (a)</i>	<i>Increase</i>
1977—	31 March	\$5.70 per week
	24 May	1.9 per cent (c)
	22 August	2.0 per cent
	12 December	1.5 per cent
1978—	28 February	1.5 per cent (d)
	7 June	1.3 per cent
	12 December	4.0 per cent
1979—	27 June	3.2 per cent
1980—	4 January	4.5 per cent
	14 July	4.2 per cent
1981—	9 January	3.7 per cent
	7 May	3.6 per cent

(a) Operative from the beginning of the first pay-period commencing on or after the date shown.

(b) \$2.50 for wage rates up to \$166 per week. 1.5 per cent for wage rates over \$166 per week.

(c) Increase of 1.9 per cent up to a maximum of \$3.80 per week.

(d) Increase of 1.5 per cent up to a maximum of \$2.60 per week.

Wage Fixation Principles

Introduction

In April 1975, the Federal Conciliation and Arbitration Commission adopted the principle of wage indexation based upon quarterly movements in the Consumer Price Index. At that time the Commission established certain principles in relation to its quarterly indexation decisions. Over the first three years that indexation cases operated, the Commission expressed concern about the viability and future of the system. In its National Wage Decision of May 1977, the Commission commented on problems relating to principles of wage fixation. The Commission also announced that a conference would be called on 25 May 1977 to discuss these problems.

The conference and its report formed the basis for the decision on wage fixation principles handed down by the President of the Commission, Sir John Moore, on 14 September 1978. (A more detailed statement of these principles can be found in the 1979 *Year Book*).

In announcing the principles, Sir John emphasised that a prime consideration in making future awards would be whether there had been substantial compliance with the principles. The Commission also decided that the principles should continue to operate until 31 December 1979. This period was subsequently extended as The Commission noted there had been substantial compliance, and that identifiable non-wage factors appeared to have dominated price increases.

After a review of the principles by way of a conference of all parties, the Commission announced on 9 February 1981 that the system of wage fixation and its principles had broken down. It called on all participants in wage fixation to apply themselves to the task of finding another course which offered prospects for overcoming the difficulties. A conference of parties assembled on 19 January 1981 and at its conclusion the President of the Commission decided that it was in the public interest that a public inquiry into the principles of wage fixation should be held. The results of the inquiry were handed down on 7 April 1981. The details of the revised principles can be found in the 1982 *Year Book*.

On 31 July 1981 the Full Bench stated that they had abandoned the system of wage fixation based on indexation. The Full Bench stated that the viability of the system depended on the voluntary co-operation of all participants in industrial relations including those not directly represented at National Wage Hearings and concluded that events since April 1981 have shown clearly that the commitment of the participants to the system is not strong enough to sustain the requirements for its continued operation.

Weekly Wage Rates

Definitions

In this section, 'weekly wage rates' is used as a short title for '*weighted average minimum weekly wage rates*'. The rates are those applicable to adult males and adult females, and are those fixed in *awards*.

The minimum wage is the lowest rate payable for a particular occupation. This minimum rate may be expressed as: (i) a total wage (e.g. in awards of the Federal Conciliation and Arbitration Commission); (ii) a basic wage plus secondary wage payments, i.e. additional amounts for skills, loadings, etc. (e.g. in awards of state wage-fixing authorities except Victoria); or (iii) in agreements registered with Federal or State wage-fixing authorities. The introduction of varying federal and state practices relating to 'total' and 'basic' wages from time to time has not affected the continuity of the statistical series.

Weighting: To arrive at a weighted average rate for a particular field (e.g. a rate for occupations in Tasmania covered by federal awards) certain data are required. The basic initial information is the award rate applying to each occupation and its relative significance (broadly, the numbers in each occupation). The calculation of average minimum rates is based on the occupational structure existing in 1954.

The individual minimum wage rates, combined to give the averages shown in the tables, are those for representative occupations within each industry. Since the aim is to measure movements in prescribed minimum rates of 'wages' as distinct from 'salaries', those awards, etc., which relate solely or mainly to salary-earners are excluded. Weighted averages of the components of the total minimum weekly wage rate (i.e. basic wage, margin and loading) are calculated separately for adult male employees covered by Federal awards, etc., and for those covered by State awards, etc.

'Federal Awards, etc.': These include awards of, or agreements registered with, the Federal Conciliation and Arbitration Commission, and determinations of the Federal Government Public Service Arbitrator.

'State Awards, etc.': These include awards or determinations of, or agreements registered with, state industrial tribunals, together with certain unregistered agreements, where these are dominant in the particular industries to which they refer. (In Tasmania the principal tribunals are the State Industrial Boards.)

'Basic Wage Rates': These are weighted averages of the weekly rates prescribed in awards, etc., for the occupations included in the calculation. For industries other than mining, metropolitan basic wage rates have generally been used. However, there are a number of occupations for which basic wage rates other than the metropolitan rate are prescribed. In all such cases, the basic wage rate actually paid is used in the tables. As a result, the weighted average basic wage shown in this section differs from the Hobart basic wage appearing elsewhere.

'Margins': These are minimum amounts, in addition to the basic wage awarded to particular classifications of employees for special features such as skill, experience, arduousness or other like factors.

'Loadings': These include industry loadings and other general loadings prescribed in awards, etc., for the occupations included in the calculation. Loadings that are not applicable to all workers in a specified award occupation (for example, those payable because of length of service; working in wet, dirty or confined spaces, etc.) are not included in the calculation.

Male and Female Rates

Limitation: The wage rates shown in the tables in this section should not be regarded as actual current averages, but rather as indexes expressed in money terms, indicative of trends. The wage rates do not measure the relative level of minimum wages as between states.

Minimum weekly wage rates for adult males are not comparable with 'average weekly earnings per employed male unit' appearing in a later section of this chapter; the latter includes not only the earnings of adult wage-earners but also those of salaried employees, junior wage-earners and part-time and casual employees; included also are over-award payments and overtime earnings. Tasmanian details by industry group are given in the next table:

Weighted Average Minimum Weekly Wage Rates and Index Numbers, Tasmania
Adult Males and Adult Females: Industry Groups, 31 December 1980 (a)

Industry group	Adult males		Adult females	
	Rates of wage (\$)	Index numbers (b)	Rates of wage (\$)	Index numbers (b)
Mining and quarrying	216.12	765.3	—	—
Manufacturing—				
Engineering, metals, vehicles, etc	205.95	729.2	194.87	978.8
Textiles, clothing and footwear	192.78	682.6	183.98	924.2
Food, drink and tobacco	201.10	712.1	179.35	900.9
Sawmilling, furniture, etc	193.83	686.3	—	—
Paper, printing, etc	204.53	724.2	—	—
Other manufacturing	193.79	686.2	184.52	926.9
All manufacturing groups	200.79	711.0	183.60	922.2
Building and construction	219.33	776.6	—	—
Railway services	222.06	786.3	—	—
Road and air transport	213.40	755.6	—	—
Shipping and stevedoring	249.43	883.2	—	—
Communication	241.66	855.7	—	—
Wholesale and retail trade	207.38	734.3	181.52	911.8
Public authority (n.e.i.) and community and business services	221.45	784.1	197.17	990.4
Amusement, hotels, personal service, etc	187.22	662.9	181.93	913.9
All industry groups	211.70	749.6	184.98	929.2

(a) These figures are subject to revision.

(b) Base of index numbers: weighted average minimum weekly wage rate, Australia, 1954 = 100.0.

The following table summarises minimum weekly wage rates for adult males and adult females in Tasmania for recent years. The averages include Federal and State awards, etc., and are for all industry groups combined.

Weighted Average Minimum Weekly Wage Rates, Tasmania (a)
Adult Males and Adult Females: All Groups
 (\$)

End of December—	Adult rate		End of December—	Adult rate	
	Male	Female		Male	Female
1976	133.95	122.15	1979	167.20	149.58
1977	147.38	134.91	1980	184.83	166.56
1978	159.23	144.66	1981	211.70	184.98

(a) Weighted average minimum weekly rates payable for a full week's work (excluding overtime) as prescribed in awards, determinations, etc.

Index Numbers

The following table shows, in summary form, the index numbers for adult male and adult female weighted average minimum weekly wage rates in Tasmania for recent years:

**Weighted Average Minimum Weekly Wage Rates, Tasmania: Index Numbers, All Groups
Adult Males and Adult Females**

End of December—	Index numbers (a)		End of—	Index numbers (a) (b)	
	Male	Female		Male	Female
1976	474.3	613.6	September 1980	652.8	830.5
1977	521.9	677.7	December 1980	654.5	836.7
1978	563.8	726.6	March 1981	681.1	867.6
1979	590.8	751.1	June 1981	706.8	899.3
1980	654.5	836.7	September 1981	717.5	906.0
1981	749.6	929.2	December 1981	749.6	929.2

(a) Base of index numbers: weighted average minimum weekly wage rate, Australia, 1954 = 100.0.

(b) Figures after March 1980 are subject to revision.

Australian Rates

In the next table, rates and index numbers are shown for each Australian state:

Weighted Average Minimum Weekly Wage Rates, Australia (a): All Groups, Adult Males							
End of December—	NSW	Vic.	Qld	SA	WA	Tas.	Australia
<i>Rates of Wages (\$)</i>							
1976	135.55	134.10	138.85	132.20	132.29	133.95	135.29
1977	149.28	147.50	152.44	145.69	148.55	147.38	149.08
1978	161.99	159.68	164.05	158.53	158.19	159.23	160.96
1979	r 170.12	r 167.77	r 170.43	r 167.12	r 165.34	167.20	r 168.81
1980	r 187.72	185.95	191.53	r 184.39	r 184.10	184.83	r 187.10
1981	217.81	215.65	219.51	215.25	205.54	211.70	216.16
<i>Index Numbers (b)</i>							
1976	480.0	474.8	491.7	468.1	468.4	474.3	479.0
1977	528.6	522.3	538.8	515.9	526.0	521.9	527.9
1978	573.6	565.4	580.9	561.3	560.1	563.8	569.9
1979	r 602.4	r 594.0	r 603.5	r 591.7	r 585.5	r 592.0	r 597.7
1980	r 664.7	658.4	678.2	652.9	r 651.9	654.5	r 662.5
1981	771.2	763.6	777.2	762.1	727.8	749.6	765.4

(a) For a full week's work (excluding overtime), as prescribed in awards, determinations, etc.

(b) Base of index numbers: weighted average minimum weekly wage rate, Australia, 1954 = 100.0.

Hourly Wage Rates in Tasmania

General

Hourly wage rates is the short title for 'Weighted average minimum hourly rates payable'. The concept is completely analogous to that embodied in weighted average minimum weekly wage rates and the calculation is similarly based on rates prescribed in awards or determinations of Federal and State industrial authorities or in agreements registered with them.

Definitions

Hours of Work: In the fixing of weekly wage rates, most industrial tribunals prescribe the number of hours constituting a full week's work for the wage rates specified. The hours of work so prescribed form the basis of the compilation of the weighted averages of hourly rates.

Rural industry is excluded from the calculation of weighted average minimum weekly wage rates and also from the calculation of weighted average minimum hourly wage rates. In addition, the shipping and stevedoring group is also excluded from the latter calculation since definite particulars for the computation of hourly wage rates are not available.

The 40-hour week has operated in Australia generally from 1 January 1948 (NSW, from 1 July 1947). Nevertheless, the number of hours constituting a full week's work (excluding overtime) differs between occupations and/or states. The weighted average standard hours of work (excluding overtime) prescribed in awards, determinations and agreements for a full working week, in respect of adult male workers in all industry groups except rural, and shipping and stevedoring, at 30 June 1982, were: NSW 39.17, Victoria, 39.30; Queensland, 39.62; SA, 39.31; WA, 39.26; Tasmania, 39.52; Australia, 39.29. Corresponding figures for adult female workers in all industry groups except rural, mining and quarrying, and building and construction, at 30 June 1982 were: NSW, 39.35; Victoria, 39.67; Queensland, 39.66; SA, 39.59; WA, 39.73; Tasmania, 39.60; Australia, 39.53.

Weekly Wage Rate Definitions: Apart from exclusion of the shipping and stevedoring industry, the definitions in the section headed 'weekly wage rates' apply with equal force to the calculation of hourly wage rates.

Summary of Details

The following table shows, for Tasmania, weighted average minimum hourly wage rates for adult male and adult female workers in all industries (except rural, and shipping and stevedoring) for recent years:

**Weighted Average Minimum Hourly Wage Rates, Tasmania, All Groups
Adult Males and Adult Females**

End of—	Rates of wage (\$)		Index numbers (a)	
	Males (b)	Females (c)	Males (b)	Females (c)
December—1975	2.8989	2.6639	409.7	531.0
1976	3.3176	3.0827	468.9	614.4
1977	3.6547	3.4046	516.6	678.6
1978	3.9458	3.6507	557.7	727.7
1979 r	4.1453	3.7748	585.9	752.4
1980	4.5824	4.2035	647.7	837.8
1981	5.2524	4.6683	742.4	930.5

(a) Base of index numbers: weighted average hourly wage rate, Australia, 1954 = 100.0.

(b) All industry groups except rural, and shipping and stevedoring.

(c) All industry groups except rural, mining and quarrying, and building and construction.

Average Weekly Earnings

Source of Data

The figures in the following section are derived from particulars of employment, wages and salaries recorded on pay-roll tax returns, from other direct collections and from estimates of the unrecorded balance. (In general, businesses with pay-rolls of less than \$1 500 per week were exempt from pay-roll tax and did not need to supply monthly details of employment and of wages and salaries.) Pay of members of the defence forces was not included.

Definitions

'Employed Male Unit': This is a special unit devised to overcome the difficulty that particulars of wages and salaries are not available separately for males and females. (The basic data available are the number of males, the number of females and the total pay-roll, only.) The number of females is converted to a *lesser equivalent number* of males by taking into account the approximate ratio of female to male earnings; a divisor for deriving average 'male' earnings is then obtained by adding the actual number of males to the

calculated number of 'male equivalents'. The divisor so obtained is called 'employed male units'.

Separate ratios of female to male average earnings are used for individual states based on information from regular surveys of weekly earnings and hours and other sources. The Australian ratio is the weighted average of the State and Territory ratios. (The ratio for Tasmania for the June quarter 1981 was 64 per cent and for Australia 66 per cent.)

Components of Pay-roll: Pay-roll includes, in addition to wages at award rates, the earnings of salaried employees, overtime earnings, over-award and bonus payments, allowances, commissions, directors' fees, and payments made in advance or retrospectively (e.g. advances of annual leave pay). Included also are the wages and salaries, not only of adults, but also of juniors; the earnings may relate to full-time, part-time or casual workers.

Invalid Comparison: Average earnings per employed male unit cannot be compared with male weighted average minimum weekly wage rates shown in the previous section. Weighted average minimum weekly wage rates relate to award rates for adult male wage earners in non-rural industry for a full weeks' work, at the end of each month or year; the average weekly earnings per employed male unit are derived from the pay-roll concept outlined in the previous paragraph and obviously cover a wider field of earnings and of wage and salary earners.

Seasonal Influence: Quarterly figures are affected by seasonal influences. For example, special payments, including prepayments for holiday periods, tend to raise the December quarter and to depress the March quarter averages. Comparisons as to trends are generally best made by relating complete years or corresponding periods of incomplete years. Alternatively, a 'seasonally adjusted' series may be used.

Discontinuance of series: In September 1981 a new quarterly survey of employees based on the ABS Central Intergrated Register was introduced to obtain employment and earnings information to produce a new average weekly earnings series. Because of the different conceptual and methodological bases, this new series is not directly comparable with the payroll-tax-based series it replaces.

Summary of Details

The following tables show, for Tasmania and Australia, average weekly earnings per employed male unit:

Average Weekly Earnings Per Employed Male Unit, Tasmania (a)

Year	Average for quarter ending— (\$)				Average for year	
	September	December	March	June	Amount (\$)	Percentage change (b)
1976-77	175.60	188.70	175.10	185.50	181.20	14.8
1977-78	195.90	204.80	194.00	201.10	199.00	9.8
1978-79	205.50	214.50	208.50	217.80	211.60	6.3
1979-80	229.30	239.70	235.40	247.30	237.90	12.4
1980-81	262.10	288.00	255.30	278.40	271.00	13.9
1981-82	293.80	n.a.	n.a.	n.a.	n.a.	n.a.

(a) For definitions, see earlier section headed 'Definitions'.

(b) Over preceding year.

Average Weekly Earnings Per Employed Male Unit, Australia (a)
(\$)

Period	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Australia
1974-75 ..	152.10	147.80	142.50	138.60	145.60	140.20	168.50	184.30	148.30
1975-76 ..	172.70	170.50	163.50	158.50	169.10	157.80	190.00	209.00	169.60
1976-77 ..	193.60	191.10	184.50	179.50	190.80	181.20	216.70	237.10	190.70
1977-78 ..	213.40	209.30	202.20	197.40	209.20	199.00	240.70	259.10	209.50
1978-79 ..	230.20	226.60	<i>r</i> 217.40	210.30	223.30	211.60	<i>r</i> 259.60	279.50	<i>r</i> 225.60
1979-80 ..	254.40	248.80	234.40	230.30	245.30	237.90	290.10	303.00	<i>r</i> 247.90
1980-81 ..	<i>r</i> 287.80	280.60	269.80	262.10	279.10	271.00	344.10	337.50	<i>r</i> 281.30
Percentage Change 1980-81 Over 1979-80									
	<i>r</i> +13.1	+12.8	+15.1	+13.8	+13.8	+13.9	+18.6	+11.4	<i>r</i> +13.5

(a) For definitions, see the section preceding the tables.

Surveys of Weekly Earnings and Hours

General

Sample surveys in respect of most employers in the private sector subject to pay-roll tax have been conducted annually during recent years by the Bureau as at a specified pay-period in October. In 1972, for the first time, government employees were included in the survey. The results of the surveys are based on returns from stratified random samples of private employers subject to pay-roll tax; non-government hospitals not subject to pay-roll tax; local government authorities; and for all federal and state government departments, authorities and semi-government bodies.

As from 1981, the Earning and Hours series has been based on a more detailed dissection of earnings and additional information on hours paid for collected each year in the December quarter of the Survey of Earnings. The Survey of Earnings was introduced in the September quarter 1981 to derive the new series of Average Weekly Earnings (see previous section).

Earnings and hours details in the new series are not comparable with those of the old series due to the significant difference in the coverage of the sample framework.

Definitions

Weekly Earnings: Gross earnings before taxation and other deductions have been made; includes: overtime earnings, ordinary time earnings, shift allowances, penalty rates, commission and similar payments; and that part of paid annual leave, paid sick leave, long service leave and paid holidays taken during the specified pay-period. It includes one week's proportion of payments made other than on a weekly basis, e.g. salary paid fortnightly or monthly. Retrospective payments are excluded.

Juniors: Those under 21 years of age not paid adult rates (but 'adults' may include those under 21 years receiving adult rates).

Full-time Employees: Employees who ordinarily work 30 hours or more a week and who received pay for a specified pay-period in October.

Result of Surveys

The following table dissects average weekly earnings and hours by overtime earnings and hours for the private and total (private and government) sectors in Tasmania:

**Average Earnings and Hours, Tasmania: Private and Total (Private and Government) Employment (a)
October 1981**

<i>Particulars</i>	<i>Private employment</i>	<i>Private and government</i>	<i>Private</i>	<i>Private and government</i>
<i>Average Weekly Overtime and Weekly Total Earnings (\$)</i>				
	<i>Average weekly overtime earnings</i>		<i>Average weekly total earnings</i>	
Adult males—				
Manufacturing	22.30	21.90	287.30	286.80
Non-manufacturing (b)	14.50	11.90	259.70	279.00
All industries (b)	17.70	14.60	271.10	281.10
Junior males, all industries (b)	n.a.	n.a.	149.40	149.60
Females, all industries (b)—				
Adult	n.a.	n.a.	214.50	237.50
Junior	n.a.	n.a.	123.30	130.50
<i>Average Weekly Overtime Hours and Weekly Total Hours Paid For</i>				
	<i>Average weekly overtime hours paid for</i>		<i>Average weekly total hours paid for</i>	
Adult males—				
Manufacturing	2.0	1.9	41.3	41.3
Non-manufacturing (b)	1.3	1.1	40.6	39.5
All industries (b)	1.6	1.3	40.9	39.9
Junior males, all industries (b)	n.a.	n.a.	39.9	39.2
Females, all industries (b)—				
Adult	n.a.	n.a.	38.2	37.4
Junior	n.a.	n.a.	39.5	37.6
<i>Average Hourly Overtime and Hourly Earnings (\$)</i>				
	<i>Average hourly overtime earnings</i>		<i>Average hourly earnings (c)</i>	
Adult males—				
Manufacturing	11.15	11.53	6.96	6.94
Non-manufacturing (b)	11.15	10.82	6.40	7.06
All industries	11.06	11.23	6.63	7.05
Junior males, all industries (b)	n.a.	n.a.	3.74	3.82
Females, all industries (b)—				
Adult	n.a.	n.a.	5.62	6.35
Junior	n.a.	n.a.	3.12	3.47

(a) Average for all employees represented in the survey but excluding managerial, executive, professional and higher supervisory staff. Full-time employees included only. For the pay-period including 15 October.

(b) Excludes rural industry and private domestic service.

(c) Derived by dividing average weekly total earnings by average weekly total hours paid for.

WAGE-FIXING AUTHORITIES

Tasmanian Industrial Boards

History

The evolution of the Tasmanian Wages Boards system is described in the 1968 *Year Book*. On 22 December 1975, Royal Assent was given to the *Industrial Relations Act* 1975. The new Act superseded the *Wages Board Act* 1920, replacing Wages Boards with Industrial Boards; the more important changes embodied in it are outlined in the 1977 *Year Book*. The following sections summarise the current situation.

Tasmanian Industrial Boards

The Tasmanian Industrial Boards are the wage-fixing Authorities for all employers whose employees are not covered by Federal or Public Service Board awards

(approximately 70 000 employees in this State). The Chairman, Deputy Chairman and Assistant Deputy Chairman of Industrial Boards are Government-appointed and act as chairmen on approximately 70 Tasmanian Industrial Boards. Supporting staff are officers of the Department of Labour and Industry.

Establishment and Constitution of Industrial Boards

Boards are established, by order of the Governor, for particular industries. The constitutional nexus of a Board is the industry of the employer, not the common occupation of the employees, as is the case under other authorities.

Each Board, of which there are about 70 in active existence, consists of an equal number of employer and employee representatives, and a Chairman. The Chairman is the Chairman of Industrial Boards, or at his direction, the Deputy Chairman of Industrial Boards or the Assistant Deputy Chairman. Board members are appointed by the responsible Minister; at least one-half (on either side) of the representatives must be employed in the industry within the Board's jurisdiction.

Board members are appointed to a three-year term of office.

Function of Boards

The function of Industrial Boards is to make awards prescribing minimum wage rates and conditions of employment that must be observed by all employers in the industries within the particular Board's jurisdiction. (An 'Industry' is defined in the Act as any industry, trade, business, undertaking, profession, calling, function, process or work performed, carried on, or engaged in by an employer.) Examples are the Mining (Lead-Zinc) Industrial Board, which is established in respect of the industry of mining and processing of silver-lead-zinc ore; the Dentists' Industrial Board, established in respect of dentists and dental mechanics, and hence covering persons employed in those industries, and the Shipbuilders' Industrial Board, established in respect of the industry of constructing, altering, or repairing ships or boats, and dunnaging of ships' holds.

An award cannot contain any matter relating to: (i) the opening or closing hours of an employer's business premises; (ii) the granting of long service leave; (iii) a bonus payment made at the discretion of an employer; or (iv) a superannuation scheme.

Awards may be made to have retrospective effect, and may be made to remain in force for a specific period. Awards may replace, rescind or amend an existing award, and are subject to the *Apprentices Act 1942*, the *Long service Leave Act 1956*, the *Public Health Act 1962*, the *Mines Inspection Act 1968* and the *Industrial Safety, Health and Welfare Act 1977*.

Meetings of Boards are normally convened by the Chairman of Industrial Boards but the responsible Minister (The Minister for Industrial Relations) may convene a Board meeting for the purpose of settling or preventing an industrial dispute.

Variations to Awards Without a Meeting of a Board

Under section 30 of the Act, the Chairman may make an award amending a previous award, without the convening of a meeting of the Board, upon written application from all representative members of the Board for the particular amendment.

Under section 31 the Chairman can make a Common Rule Award, where the provisions of at least five awards are affected.

On receipt of an application, a notice is published in the daily press. A hearing is then conducted, at which the submissions of employer and employee organisations are considered by the chairman. Following the hearing, the Chairman may make a Common Rule Award.

This award may only relate to the following matters: (i) a basic wage; (ii) a minimum wage; (iii) standard hours of work; (iv) paid leave of absence; and (v) any matter that is determined in an award made under the *Federal Conciliation and Arbitration Act 1904* that affects or relates to industries in which at least five Boards have jurisdiction. However,

this restriction is removed if the award is made on joint application from the Tasmanian Trades and Labour Council and an appropriate employer organisation (usually the Tasmanian Chamber of Industries).

One example of a Common Rule Award is an award made following a 'National Wage' decision of the Federal Conciliation and Arbitration Commission.

Industrial Agreements

Under section 32 of the Act, an industrial agreement may be made, for the purpose of resolving an industrial matter that does not extend to the whole of an industry within the jurisdiction of a Board. When the Chairman satisfies himself that the agreement has been executed by, or on behalf of, all parties involved in the matter, and that the provisions of the agreement are in line with appropriate award provisions, the Chairman 'shall certify that agreement as an award having like effect under this Act'.

Industrial Appeals Tribunal

This Tribunal was set up to provide for appeals against a determination made by a Board or the Chairman to include, or refuse to include, any specified provision in any award or to refuse to make an award on any specified matter. Such appeals must be made within 21 days of the making of a determination. After hearing the appeal, the Tribunal (unless it dismisses the appeal) may reverse or vary the determination in respect of which the appeal is brought; and to give effect to its decision the Tribunal may vary or revoke an award, or make a new award.

A decision of the Tribunal can be challenged only on the grounds of illegality, by application to the Supreme Court.

Compulsory Conferences

Under section 50 of the Act, the Minister may call a compulsory conference for the purpose of settling or preventing an industrial dispute.

The Minister may summons any person whose presence may help prevent or settle a dispute.

The compulsory conference is presided over by a person directed by the Minister to undertake such duty; in practice this person is usually the Chairman, Deputy Chairman or Assistant Deputy Chairman of Industrial Boards.

If after considering the views expressed at the conference the President is of the opinion that certain action should be taken to effect the aim of the conference (viz. to settle or prevent an industrial dispute) then he may, by written order, direct such action to be taken.

Tasmanian Public Service Board

General

The *Public Service Act* 1973 established two new industrial authorities, the Public Service Board and Public Service Arbitrator (for details see the next section) to deal with awards, working conditions, etc., for employees of the State Government and certain State authorities. The Public Service Board comprises three Commissioners appointed by the Governor for terms not exceeding five years. One of the three Commissioners is appointed Chairman of the Board. In addition to members of the State Public Service the Board's jurisdiction includes persons employed in the teaching service, police force, parliamentary staff positions, public hospitals, non-academic staff of the College of Advanced Education and various State authorities.

The Public Service Board Department is the personnel authority for the Public Service and is required to examine the business of each department's activities and business methods to find ways of economising and promoting efficiency in the management and working of departments. The work of the Public Service Board Department, therefore, involves inspections and the recruitment, appointment, salary classification, training and

promotion and disciplinary supervision of all persons employed under the *Public Service Act 1973*.

Industrial Functions

The Public Service Board may make awards covering wages, salaries and conditions of work for employees falling within its jurisdiction. A main function of the Board is determining 'principal awards', i.e. an award which covers all employees within the scope of a particular group such as administrative and clerical officers. The determining of a principal award involves a complete review of the wages and salaries and other work conditions of all positions within the scope of the particular award.

Unless revoked as principal award is effective for three years. However, during the currency of a principal award it may be amended by the Board to eliminate anomalies, errors or defects contained in it, to incorporate determinations of the Federal Conciliation and Arbitration Commission (e.g. national wage case decisions, etc.), or for a number of other reasons.

The Tasmanian Public Service Arbitrator

The Public Service Arbitrator, appointed by the Governor for a term not exceeding five years, has the same area of jurisdiction as the Public Service Board. Applications to the Arbitrator for arbitration on awards may be made where the Public Service Board has: (i) refused an application for an award; (ii) made an award (including an award to supplement a consent award); or (iii) allowed three months or longer to elapse after an application has been made for an award without (a) refusing the application or (b) making an award (including a consent award). Such applications are lodged with the registrar and the Arbitrator. After he has been satisfied that the applicant is entitled to apply for arbitration, arranges to hear the applicant and others affected by the award. After hearing and considering an application the Arbitrator may: (i) refuse the application; (ii) confirm the award or any of its provisions; (iii) direct the Board to vary the award by omitting, altering or adding to the award's provisions; or (iv) where it has refused or failed to make an award, to make an award in specified terms.

The Public Service Arbitrator has an additional function of reviewing individual salary classifications made by any controlling authority following the handing down of any new principal award. Applications for consideration of particular salary classifications may be made by any registered employee organisation in respect of any office or position held by any of its members. In addition, the *State Employees (Long Service Leave) Act 1950* was amended on 19 September 1974. A new section provided for the settlement of any dispute as to whether or when an employee is or has become entitled to leave of absence or an allowance in lieu, or whether a deceased employee's personal representative is or has become entitled to payment of an allowance. The section stipulates that the Public Service Arbitrator shall hear and determine all such disputes.

INDUSTRIAL DISPUTES

Statistics of industrial disputes refer only to those involving a stoppage of work of 10 man-days or more. The information is compiled from the following sources: (i) direct from employers and trade unions; (ii) reports from government departments and authorities; (iii) reports from state and federal industrial authorities; and (iv) information contained in trade journals, newspapers, etc. Particulars of some stoppages are estimated and the following statistics should be regarded as giving only a broad measure of industrial stoppages. The details relating to workers involved, working days lost and estimated loss in wages are in respect of those thrown out of work at the establishments where the stoppages actually occurred, only.

Industrial Disputes (a): Tasmania

Year	Disputes no.	Workers involved '000	Working days lost '000	Estimated loss in wages \$'000
1976	43	30.9	62.2	1 792.7
1977	39	7.9	26.7	928.0
1978	46	17.1	35.4	1 356.0
1979	53	21.1	59.8	2 276.0
1980	52	9.6	91.5	(b)4 390.0
1981	88	16.9	64.3	(b)3 466.0

(a) The statistics relate to stoppages involving 10 man-days or more in the establishments where the stoppages occurred, only.

(b) The estimated Tasmanian loss was 1.6 per cent of the Australian total in 1981.

The previous table summarises statistics relating to industrial disputes in Tasmania for the last six years; the next table summarises industrial disputes in Australia:

Industrial Disputes (a): Australia

Year	Disputes no.	Workers involved '000	Working days lost '000	Estimated loss in wages \$'000
1976	2 055	2 189.9	3 799.2	114 552.0
1977	2 090	596.2	1 654.8	59 674.0
1978	2 277	1 075.6	2 130.8	78 404.0
1979	2 042	1 862.9	3 964.4	148 614.0
1980	2 429	1 172.8	3 320.2	152 022.0
1981	2 915	1 251.8	4 192.2	221 779.0

(a) The statistics relate to stoppages involving 10 man-days or more in the establishments where the stoppages occurred, only.

The following table analyses industrial disputes according to the industry of the labour force involved:

Industrial Disputes by Industries: Tasmania

Period	Mining	Manufacturing					Total manu- facturing	Construc- tion
		Food, beverages, tobacco	Textiles, clothing, foot- wear	Paper and paper products, printing and publish- ing	Metal products, machin- ery and equip- ment	Other		
Number of Disputes								
1976	12	1	—	7	2	5	15	4
1977	14	3	—	1	2	3	9	6
1978	15	4	—	1	4	5	14	3
1979	13	6	—	1	3	2	13	3
1980	17	3	—	5	2	1	14	1
1981	22	2	—	5	7	2	16	8
Words Involved (Directly and Indirectly) ('000)								
1976	3.6	4.4	1.9	2.2	1.2	4.4	14.1	3.8
1977	3.1	0.9	—	0.1	0.3	—	1.4	0.3
1978	3.0	5.2	—	1.3	1.6	0.3	8.4	1.3
1979	3.8	4.2	0.2	0.6	1.2	0.3	6.9	1.7
1980	5.0	0.4	—	1.5	0.2	—	2.3	—
1981	5.5	0.1	—	0.9	1.4	—	2.4	2.1

Industrial Disputes by Industries: Tasmania—continued

Period	Manufacturing						Total manu- facturing	Construc- tion
	Mining	Food, beverages, tobacco	Textiles, clothing, foot- wear	Paper and paper products, printing and publish- ing	Metal products, machin- ery and equip- ment	Other		
Working Days Lost ('000)								
1976	8.2	4.7	1.9	7.2	15.4	6.5	35.7	4.2
1977	18.2	0.9	—	0.8	0.2	0.2	2.0	3.0
1978	15.2	7.5	—	2.6	2.1	0.5	12.7	1.3
1979	19.9	15.4	0.5	1.3	5.6	0.8	24.7	2.9
1980	70.6	0.5	—	4.7	2.8	0.2	8.6	0.1
1981	26.3	1.1	—	2.3	3.3	0.5	7.3	3.8
Estimated Loss In Wages (\$'000)								
1976	307.0	120.1	49.8	186.4	371.8	184.4	912.5	135.7
1977	659.0	28.0	—	22.0	5.0	8.0	63.0	110.0
1978	669.0	250.0	—	77.0	78.0	19.0	424.0	44.0
1979	813.0	550.0	17.0	47.0	224.0	29.0	906.0	99.0
1980	3 397.0	20.0	—	189.0	162.0	9.0	399.0	5.0
1981	1 581.0	50.0	—	117.0	148.0	27.0	342.0	200.0
Number of Disputes								
1976	3	2	—	3	—	—	4	43
1977	3	1	—	2	1	—	3	39
1978	2	5	2	1	1	—	1	46
1979	3	5	2	—	—	—	6	53
1980	2	1	1	3	—	—	2	52
1981	3	3	2	9	—	—	13	88
Workers Involved (Directly and Indirectly) ('000)								
1976	1.6	1.7	0.2	0.1	0.4	—	5.5	30.9
1977	0.4	1.2	—	0.1	1.2	—	0.2	7.9
1978	0.3	1.6	0.8	—	0.2	—	0.1	17.1
1979	1.1	2.5	0.6	—	0.2	—	3.3	21.1
1980	0.3	—	—	0.2	—	—	0.1	9.6
1981	0.4	0.3	—	2.6	—	—	1.6	16.9
Working Days Lost ('000)								
1976	1.7	1.8	0.2	3.2	0.4	—	6.9	62.2
1977	0.7	0.5	—	0.1	1.2	—	0.9	26.7
1978	0.6	2.1	0.8	—	—	—	—	35.4
1979	2.6	3.0	1.1	—	0.1	—	1.4	59.8
1980	0.2	—	—	0.2	—	—	0.2	91.5
1981	0.5	0.1	0.2	9.9	—	—	4.1	64.3
Estimated Loss in Wages (\$'000)								
1976	47.7	73.0	5.3	120.3	9.6	—	181.7	1 792.7
1977	34.0	17.0	—	5.0	30.0	—	10.0	928.0
1978	21.0	75.0	27.0	1.0	1.0	—	—	1 356.0
1979	91.0	101.0	40.0	—	4.0	—	50.0	2 276.0
1980	6.0	—	—	1.2	—	—	9.0	4 390.0
1981	25.0	6.0	9.0	466.0	—	—	208.0	3 466.0

(a) Includes: agriculture, grazing, etc.; finance and insurance; wholesale and retail trade; real estate and business services; electricity, gas and water; public administration and defence; and community services.

Further References**A.B.S. Publications**

The information contained in this chapter is generally available in the 6000.0 series of publications produced by the Canberra Office of the ABS. The main bulletins of this series are the following:

The Labour Force (6203.0), monthly.

The Labour Force (6204.0), annual.

Average Weekly Earnings (6302.0), quarterly.

Wage Rates (6312.0), monthly.

Industrial Disputes (6322.0), quarterly.

Consumer Price Index (6401.0), quarterly.

Average Retail Prices of Selected Food and Grocery Items, Six State Capital Cities and Canberra (6403.0), quarterly.

Price Index of Materials Used in Building Other than House Building (6407.0), monthly.

Price Index of Materials Used in House Building (6408.0), monthly.

Price Index of Metallic Materials (6410.0), monthly.

Price Index of Materials Used in Manufacturing Industry (6411.0), monthly.

Price Index of Articles Produced by Manufacturing Industry (6412.0), monthly.

Other Publications

COMMISSION OF INQUIRY INTO POVERTY (R. F. Henderson, Chairman). *Poverty in Australia*, Vols. 1 and 2 (AGPS, Canberra, 1975).

DEPARTMENT OF EMPLOYMENT AND YOUTH AFFAIRS. Monthly Review of the Employment Situation.

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Chapter 11

HOUSING AND CONSTRUCTION

DWELLING STATISTICS

The 1981 Census

Information concerning the housing of the State's population is obtained from householders' schedules collected during population censuses. Statistics on dwellings derived from the 1981 Census of Population and Housing are included in this chapter. For Census purposes, dwellings are divided into two groups, occupied dwellings and unoccupied dwellings. These are defined below:

Definitions

Occupied Dwelling: An *occupied dwelling* is defined as the premises occupied by a household on Census night (for a definition of *household* see below). Occupied dwellings are further classified into the following two categories:

(i) A *private dwelling* is normally a house, room or flat but it can also be a tent, houseboat, or a caravan if standing on its own block of land, and not occupied by members of the same household resident in an adjacent dwelling. It is important to note that the total number of dwellings may be more than the total number of known structures in any given area.

(ii) *Non-private dwellings* are hotels, motels, hostels, boarding houses, gaols, religious and charitable institutions, defence establishments and other communal dwellings. Usually, occupants of such dwellings use communal facilities such as hotel dining rooms or mess halls. A caravan in a caravan park (whether there permanently or temporarily) is treated as part of a non-private dwelling, as are self-contained units provided by commercial enterprises such as hotels, motels or guest houses.

Unoccupied Dwelling: An *unoccupied dwelling* is a structure built specifically for living purposes and capable of being lived in, but unoccupied at the time of the Census. Vacant houses, holiday houses, huts, cabins (other than seasonal workers' quarters) and houseboats are therefore counted as unoccupied dwellings; but vacant tents, garages and caravans (if not normally occupied) are not. Only private dwellings can be classified as unoccupied. Unoccupied dwellings include dwellings vacant because they have been newly completed, vacant for demolition or repair, holiday homes, dwellings to let, and dwellings where the household was absent on Census night.

Household: For Census purposes, a *household* is a group of people who live together as a single domestic unit and eat together, the food eaten by members being served from a common supply. A person living alone is also a household. It is possible, then, for more than one household to live in one house or structure. For example, a lodger who lives with a family and provides all his food for himself is not a member of the family's household but constitutes a separate household and therefore completes a separate Householder's Schedule.

Distribution of Dwellings

The following table, shows the distribution of occupied and unoccupied dwellings at 30 June 1976, and 30 June 1981 by local government area.

Number of Occupied and Unoccupied Private Dwellings at 30 June 1976 and 1981

Local Government Area (Statistical Division and Subdivision in Bold Type)		1976 Census			1981 Census		
		Occupied	Unoccupied	Total	Occupied	Unoccupied	Total
Hobart (H)		17 693	1 342	19 035	17 941	1 519	19 460
Glenorchy (H)		12 825	556	13 381	13 860	588	14 448
Clarence (H)		11 940	866	12 806	13 560	911	14 471
Brighton (H) (S)		1 333	40	1 373	2 573	145	2 718
Kingborough (H) (S)		4 165	332	4 497	5 422	422	5 844
New Norfolk (H) (S)		2 568	181	2 749	2 708	224	2 932
Sorell (H) (S)		1 413	1 413	2 826	1 818	1 443	3 261
Bothwell (S)		253	669	922	254	842	1 096
Bruny (S)		123	303	426	157	348	505
Esperance (S)		966	294	1 260	1 005	371	1 376
Glamorgan (S)		452	448	900	582	507	1 089
Green Ponds (S)		261	23	284	312	22	334
Hamilton (S)		953	165	1 118	763	287	1 050
Huon (S)		1 385	110	1 495	1 465	102	1 567
Oatlands (S)		675	152	827	677	149	826
Port Cygnet (S)		617	239	856	732	284	1 016
Richmond (S)		523	76	599	600	73	673
Spring Bay (S)		541	281	822	619	353	972
Tasman (S)		327	458	785	408	528	936
HOBART		50 116	4 279	54 395	55 844	4 743	60 587
SOUTHERN		8 897	3 669	12 566	9 612	4 375	13 987
Launceston		11 297	871	12 168	11 456	918	12 374
Beaconsfield		3 768	709	4 477	4 400	746	5 146
Deloraine		1 479	231	1 710	1 609	253	1 862
Evandale		463	74	537	587	46	633
George Town		1 765	524	2 289	2 043	593	2 636
Lilydale		2 391	100	2 491	2 664	166	2 830
Longford		1 630	150	1 780	1 839	146	1 985
St Leonards		5 246	275	5 521	6 237	319	6 556
Westbury		1 660	131	1 791	2 079	159	2 238
Tamar		29 699	3 065	32 764	32 914	3 346	36 260
Campbell Town		495	107	602	496	138	634
Fingal		897	305	1 202	974	310	1 284
Flinders		303	78	381	344	110	454
Portland		567	602	1 169	772	799	1 571
Ringarooma		703	165	868	753	145	898
Ross		173	72	245	168	81	249
Scottsdale		1 226	328	1 554	1 422	317	1 739
North Eastern		4 364	1 657	6 021	4 929	1 900	6 829
NORTHERN		34 063	4 722	38 785	37 843	5 246	43 089
Burnie		5 762	359	6 121	6 382	459	6 841
Circular Head		2 197	428	2 625	2 365	455	2 820
Devonport		6 565	433	6 998	7 593	510	8 103
Kentish		1 166	130	1 296	1 277	123	1 400
King Is.		747	122	869	777	114	891
Latrobe		1 565	313	1 878	1 754	371	2 125
Penguin		1 440	106	1 546	1 601	124	1 725
Ulverstone		3 593	325	3 918	4 155	328	4 483
Wynyard		3 272	357	3 629	3 682	488	4 170
North Western		26 307	2 573	28 880	29 586	2 972	32 558
Gormanston		99	29	128	41	1	42
Queenstown		1 254	127	1 381	1 171	125	1 296
Strahan		136	113	249	138	16	154
Waratah		497	64	561	547	83	630
Zeehan		1 198	205	1 403	1 486	204	1 690
Western		3 184	538	3 722	3 383	429	3 812
MERSEY-LYELL		29 491	3 111	32 602	32 969	3 401	36 370
TASMANIA		122 567	15 781	138 348	136 268	17 765	154 033

Unoccupied Dwellings: The reasons dwellings were unoccupied are detailed in the table below.

Unoccupied Private Dwellings — Reason Unoccupied, 1976 and 1981

Reason unoccupied	1976 Census		1981 Census	
	Number of unoccupied dwellings	Percentage	Number of unoccupied dwellings	Percentage
For sale	552	3.5	784	4.4
To let (a)	978	6.2	1 294	7.3
New (b)	520	3.3	457	2.6
Vacant for repair	612	3.9	755	4.2
Holiday home	6 614	41.9	7 283	41.0
Condemned	360	2.3	285	1.6
Resident temporarily absent or not stated	4 702	29.8	5 302	29.8
N.e.i.	1 448	9.2	1 605	9.0
Total	15 786	100.0	17 765	100.0

(a) Other than holiday home.

(b) Awaiting occupancy.

Structure of Occupied Dwellings: The following table classifies occupied private dwellings by type of structure.

Structure of Occupied Private Dwellings, 30 June 1981

Structure	No. of Dwellings	Percent
Separate house	116 303	85.8
Semi-detached house	2 342	1.7
Row, Terrace House	928	0.7
Other medium density	11 832	8.7
Flats over 3 storeys	539	0.4
Mobile home	571	0.4
Improvised	204	0.2
Other and Not Stated	2 879	2.1
Total	135 598	100.0

Persons per Dwelling: The following table shows the occupancy level of private dwellings; sixty percent of occupied dwellings house less than four people.

Number of Persons in Occupied Private Dwellings, 1976 and 1981

Persons in dwellings	1976 Census		1981 Census	
	Number of dwellings	Percentage	Number of dwellings	Percentage
1	18 110	14.9	23 760	17.5
2	33 720	27.7	39 598	29.2
3	21 054	17.3	23 240	17.1
4	23 842	19.6	26 399	19.5
5	14 234	11.7	14 483	10.7
6	6 662	5.5	5 448	4.0
7	2 592	2.1	1 748	1.3
8 or more	1 618	1.3	922	0.7
Total	121 832	100.0	135 598	100.0

Nature of Occupancy: The following table details the nature of occupancy of private dwellings. (Unoccupied private dwellings and non-private dwellings are not included.)

Nature of Occupancy of Occupied Private Dwellings, 1976 and 1981

Nature of occupancy	1976 Census		1981 Census			
	Number of dwellings	Percentage	Number of dwellings	Percentage	Persons	Percentage
Owner	38 852	31.9	44 740	33.0	118 391	29.3
Purchaser	43 958	36.1	44 977	33.2	159 421	39.5
Owner/purchaser undefined	474	0.4	3 188	2.4	9 021	2.2
Tenant—housing authority	6 298	5.2	9 552	7.0	31 848	7.9
Tenant—other	23 340	19.2	24 357	18.0	62 971	15.6
N.e.i.	6 814	5.6	5 506	4.1	14 411	3.6
Not stated	2 096	1.7	3 278	2.4	7 344	1.8
Total	121 832	100.0	135 598	100.0	403 407	100.0

Number of Rooms: The following table provides a profile of occupied private dwellings showing number of rooms. Also shown is the number of persons living in dwellings classified by the number of rooms on 30 June 1981.

**Number of Dwellings and Persons by Number of Rooms:
Occupied Private Dwellings, 1976 and 1981**

Number of rooms	1976 Census		1981 Census			
	Number of dwellings	Percentage	Number of dwellings	Percentage	Persons	Percentage
1	616	0.5	542	0.4	753	0.2
2	2 208	1.8	2 310	1.7	3 121	0.8
3	5 842	4.8	6 916	5.1	10 663	2.6
4	13 766	11.3	16 716	12.3	34 977	8.7
5	43 950	36.1	48 273	35.6	148 002	36.7
6	32 306	26.5	35 149	25.9	113 104	28.0
7	12 712	10.4	14 380	10.6	50 796	12.6
8 or more	8 542	7.0	9 823	7.2	38 672	9.6
Not stated	1 890	1.6	1 489	1.1	3 319	0.8
Total	121 832	100.0	135 598	100.0	403 407	100.0

BUILDING STATISTICS

Scope

The scope of building statistics is restricted to building work in the creation of or significant alteration or addition to structures designed to house people, plant, machinery, vehicles, etc. An alteration or addition is regarded as significant if it is valued on completion at \$10,000 or more. Construction work such as the building of railways, bridges, earthworks, water storages, piers, wharves, etc. is excluded.

When a dwelling is attached to a new building, the whole unit, both in regard to number and value, is classified according to the type of new building (e.g. a new shop and dwelling is classified simply as a shop). Figures for other dwellings include 'home units' but not conversions of existing buildings into flats. Number of 'other dwellings' refers to the number of new individual dwelling units (e.g. one block of flats containing 10 separate flat units would be counted as 10 dwellings).

Details obtained from government authorities on their construction programs and from building contractors refer to all parts of the State. Details for owner-builders cover only those areas subject to building control by local government authorities; thus some farm buildings are excluded but this does not materially affect the figures.

Change in Series

Minor changes have been made in the scope and presentation of building statistics from 1973-74. For dwellings, separate figures are now shown for the value of new work, and the value of alterations and additions valued at \$10 000 and over. Previously, data were only published for new work and alterations and additions combined (however, new work and alterations and additions are still combined for 'other building'). Up to 1972-73, alterations and additions valued at \$10 000 and over were classified as new dwelling units, but are *not* counted as dwelling units from 1973-74. Alterations and additions valued at under \$10 000 are excluded from building statistics.

Source of Data

The main statistics relate to building approvals and to building operations (commencements, completions, etc.). The data are derived as follows:

Building Approvals: These comprise: (i) approvals by local government authorities for the construction of private buildings; and (ii) contracts let and day labour projects commenced by public authorities. Details are compiled monthly.

Building Activity: Returns are obtained from: (i) building contractors engaged in the erection of new buildings; (ii) owner-builders; and (iii) federal, state, local and semi-government authorities. Statistics are compiled at quarterly intervals.

Definitions

A Dwelling: is classified as either a 'House' or an 'Other Dwelling':

- (i) a 'House' is defined as a building which has been designed or adapted so that its prime purpose is to be a single self-contained (i.e. including bathing and cooking facilities) dwelling unit which is completely detached from other buildings, and occupies (except in such cases as dwellings built for employees or families of the owner or lessee of the land) a separate titled block of land.
- (ii) an 'Other Dwelling' is defined as a self-contained structural dwelling unit other than a house as defined in (i) above. These include flats, home units, semi-detached dwellings, villa units, town houses, etc.

Contractor-built Houses: Those erected under contract, or in anticipation of sale or rental.

Owner-built: An 'owner-built' house is one erected by the owner, (other than a recognised building contractor) or under his direction, without the services of a single contractor responsible for the whole job. Houses built by businesses (other than recognised building contractors) are also included in this category.

Commenced: A building is regarded as having commenced in a particular quarter when the value of work done on that job to the end of the quarter is first reported to be equal to or greater than the following threshold values:

- (i) for house jobs (including alterations and additions to houses), \$2 000;
- (ii) for other dwelling and other building jobs (including alterations and additions to other dwellings and other buildings), \$5 000.

However where advice has been received from the relevant authority that a first inspection has been made on a particular building job, that job is regarded as having

commenced even though the value of work reported by the builder as having been done to the end of the quarter is below the threshold.

Under Construction: A building is regarded as being under construction at the end of a period if it has been commenced but has not been completed, and work on it has not been abandoned.

Value of Building: approved, commenced, completed, or under construction represents the estimated value of the whole job when completed, *excluding* the value of the land on which the job is carried out. Site preparation costs are included.

Value of Building Work Done: represents the estimated value of the building work actually carried out during the period.

All values shown are *current values*, i.e. no adjustment has been made for the substantial rise in building costs over recent years. Some perspective to the increases in values can be gained from the wholesale price indexes of materials used in house building and of materials used in building other than house building for Hobart, and from increases in average weekly earnings per employed male unit for Tasmania (see table and graphs appearing later in this Chapter).

Building Approvals

The following two tables show details of building approvals; a distinction is made between 'private' and 'public' and the information is dissected to give separate figures for statistical divisions. In 1980-81, 42 per cent of the total value of building approvals was attributed to the Hobart Division, 6 per cent to the Southern Division, 31 per cent to the Northern Division, and 21 per cent to the Mersey-Lyell Division.

Building Approvals, by Statistical Division, 1980-81

Particulars	Hobart	Southern	Northern	Mersey-Lyell	Total Tasmania
<i>Number</i>					
New dwellings—Private	819	292	795	553	2 459
Public	421	8	173	139	741
Total	1 240	300	968	692	3 200
<i>Value (\$'000)</i>					
New dwellings—Private	30 072	7 421	25 691	19 473	82 657
Public	11 260	184	4 128	3 476	19 048
Alterations and additions to dwellings (a)—Private	3 106	474	2 046	1 295	6 920
Public	—	—	30	—	30
Other building—Private	21 646	1 781	10 551	11 406	45 384
Public	10 071	670	14 065	2 999	27 806
All buildings—Private	54 823	9 676	38 288	32 174	134 961
Public	21 331	855	18 223	6 475	46 884
Total	76 154	10 530	56 511	38 649	181 845

(a) Valued at \$10 000 and over.

Building Approvals, Tasmania

Particulars	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
<i>Number</i>						
New dwellings—Private	3 673	3 462	2 757	2 811	2 639	2 459
Public	763	940	932	833	676	741
Total	4 436	4 402	3 689	3 644	3 315	3 200

continued next page

Building Approvals, Tasmania—continued

<i>Particulars</i>	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
<i>Value (\$'000)</i>						
New dwellings—Private	88 100	92 367	78 136	83 508	81 872	82 657
Public	13 523	18 159	17 961	17 700	16 772	19 048
Alterations and additions to dwellings (a)—Private	2 295	3 877	4 817	5 077	5 828	6 920
Public	31	—	—	12	—	30
Other building—Private	25 217	37 474	41 623	30 943	56 931	45 384
Public	31 224	48 685	45 192	46 176	34 510	27 806
All building—Private	115 612	133 718	124 576	119 527	144 631	134 961
Public	44 777	66 844	63 153	63 889	51 282	46 884
Total	160 390	200 562	187 729	183 416	195 912	181 845

(a) Valued at \$10 000 and over.

Building Construction*Houses Constructed*

The next table shows details of the number and value of houses commenced, completed and under construction for recent years:

Construction of New Houses, Tasmania

<i>Year</i>	<i>Commenced</i>		<i>Completed</i>		<i>Under construction at end of year</i>	
	<i>Number</i>	<i>Value (a)</i>	<i>Number</i>	<i>Value (a)</i>	<i>Number</i>	<i>Value (a)</i>
		<i>(\$m)</i>		<i>(\$m)</i>		<i>(\$m)</i>
1975-76	3 078	74.9	2 804	63.3	1 981	49.4
1976-77	2 966	81.0	3 137	84.9	1 778	49.1
1977-78	2 688	77.5	2 833	82.6	1 615	46.0
1978-79	2 889	88.7	2 617	80.7	1 885	59.3
1979-80	2 395	77.4	2 721	87.2	1 487	49.3
1980-81	2 450	87.5	2 510	88.7	1 220	44.6

(a) When completed.

The following table shows, for Tasmania, the number of houses built by the public sector for recent years, and distinguishes between those built for public authorities (all types) and those built for private persons:

Number of New Houses Completed for Public Authorities and Private Persons, Tasmania

<i>Year</i>	<i>For public authorities</i>	<i>For private persons</i>	<i>Total</i>	<i>Year</i>	<i>For public authorities</i>	<i>For private persons</i>	<i>Total</i>
1975-76	793	2 011	2 804	1978-79	542	2 075	2 617
1976-77	696	2 441	3 137	1979-80	479	2 242	2 721
1977-78	601	2 232	2 833	1980-81	450	2 060	2 510

The principal construction authority in Tasmania is the Housing Division of the State Department of Housing and Construction but 'houses built for public authorities' include construction by, or for, other State and Federal Government departments, instrumentalities, etc.

Government Dwelling Construction

The authority responsible for Government home construction in Tasmania is the Housing Division of the Department of Housing and Construction. The Division administers that portion of the *Homes Act* 1935 which relates to the purchase and development of land for housing and the erection of homes for rental and sale. These were initially functions of the Housing Division of the Agricultural Bank of Tasmania, but in 1953 a separate Housing Department was established. The Department of Housing and Construction was established under the *Housing and Construction Act* 1977. The Department embraces the functions of the former Housing Department and the Architectural Branch of the former Public Works Department, now called the Construction Division. Since 1980 the two Divisions have functioned as separate entities and legislation to establish them as separate departments is pending.

Home construction became a major function of Government during World War II. Large scale Government housing projects, which commenced in 1944, were funded under the first Commonwealth-State Housing Agreement of 1945.

Aggregate Dwellings Completed by State Housing Authorities in Tasmania,
from 1944 to 30 June, 1982 (a)

Type of Dwelling	Bed-Sitting Room	One Bedroom	Two Bedrooms	Three (b) Bedrooms	Total
Houses (c)	-	2	729	17,236	17,967
Multi-unit flats	1	129	169	17	316
Elderly persons' housing	468	1,079	-	-	1,547
Other medium density	-	49	825	141	1,015
Movable (granny) units	-	29	-	-	29
Total dwellings	469	1 288	1 723	17 394	20 874

(a) Figures also include 196 dwellings built during World War II before 1944.

(b) Figures also include 16 four bedroom houses.

(c) Figures include a small number of semi-detached houses built on separate titles.

Until the 1970's the dwellings constructed were predominantly detached, three bedroom houses but in more recent years there has been a marked increase in the construction of other dwellings including elderly persons' homes. In 1968-69, for example, the Housing Department completed 604 dwellings, all of which were detached houses. In 1981-82, on the other hand, the Housing Division completed 698 dwellings comprising 360 houses, 212 elderly persons' homes and 126 other medium density dwellings.

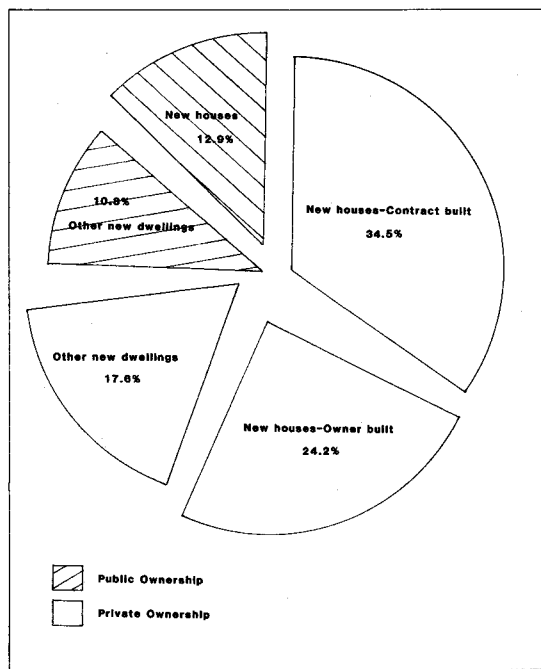
Also in recent years, there has been a reduction of work in the Division's outer-suburban housing developments with a corresponding increase in urban infill construction. It is expected that the Division's involvement in outer-suburban expansion will halt in 1982-83. Concentration will then be on smaller projects in and around existing urban areas. This may continue for only a few years until limited resources of suitable land are depleted when it may become necessary to return to outer suburban development.

Construction of New Houses and Other New Dwellings

The figures on dwelling construction for recent years show an increasing proportion of new dwellings in the form of flats, units, etc. In 1980-81, 'other new dwellings' comprised 28 per cent of the total number of dwellings completed compared to only 15 per cent in 1969-70.

The pie chart below shows the number of new houses and other new dwellings completed, dissected by type of ownership, as a proportion of the total number of dwellings completed:

New Dwellings Completed, Tasmania, 1980-81
(Proportion of Total Number)



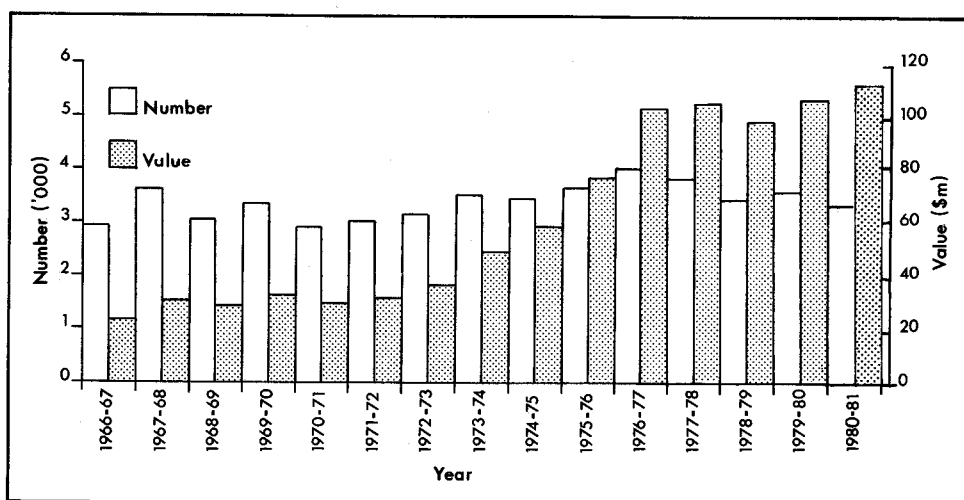
In the following table, details are given of completions of new houses and other new dwellings for recent years:

New Houses and Other New Dwellings Completed, Tasmania						
Particulars	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Number						
New houses—						
Public ownership—						
Contract-built	465	327	342	221	247	176
Day labour	328	369	259	321	232	274
Private ownership—						
Contract-built	1 001	1 069	973	987	1 016	1 210
Owner-built	1 010	1 372	1 259	1 088	1 226	850
Total houses	2 804	3 137	2 833	2 617	2 721	2 510
Other new dwellings (a)	879	902	1 052	875	882	993
Total houses and other dwellings	3 683	4 039	3 885	3 492	3 603	3 500
Value (\$'000)						
New houses	63 272	84 877	82 565	80 718	87 189	88 700
Other new dwellings	13 858	18 011	23 136	18 742	19 264	22 875

(a) Individual dwelling units.

The following graph shows the number and value of new dwellings completed from 1967-68 to 1980-81. As noted earlier, all values shown in this section are *current values*. A series for the value of new dwellings completed adjusted to a constant prices basis (to take account of changes in building construction costs) would, if it was available, follow a trend similar to that shown by the number of dwellings completed.

New Dwellings Completed (a), Tasmania



(a) Alterations and additions valued at \$10 000 or more are included to 1972-73 but excluded from 1973-74.

The following three tables show the value of all buildings completed by ownership and class of building:

Value of all Buildings Completed:
Private Ownership by Type, Tasmania
(\$'000)

Type of Building	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81 (a)
New houses	50 147	71 417	70 227	68 450	76 287	75 000
Other new dwellings	12 067	16 309	17 615	13 277	11 417	14 032
Total new dwellings	62 215	87 729	87 842	81 727	87 703	89 000
Alterations and additions to dwellings (b)	1 644	2 272	4 232	4 776	5 356	6 700
Hotels, etc.	3 828	3 662	5 528	6 436	4 653	2 799
Shops	2 056	6 761	11 754	7 155	14 787	26 927
Factories	6 599	5 071	5 500	7 299	5 809	12 115
Offices	4 519	6 262	4 481	7 599	5 757	3 390
Other business premises	1 263	3 080	3 942	5 021	3 269	7 318
Education	1 736	919	3 178	1 515	1 029	2 061
Religion	433	424	1 532	910	627	1 075
Health	657	431	319	377	4 007	1 100
Entertainment and recreation ..	1 617	2 654	1 505	1 675	3 076	3 432
Miscellaneous	2 065	1 710	2 041	840	1 693	2 182
Total other building	24 777	30 974	39 781	38 827	44 706	62 397
Total all building	88 635	120 972	131 854	125 330	137 765	158 000

(a) From 1980-81, figures shown for the value of new houses, total new dwellings, alterations and additions and total all building have been rounded to the nearest \$100 000.

(b) Valued at \$10 000 and over.

**Value of Buildings Completed: Public Ownership by Type, Tasmania
(\$'000)**

<i>Type of Building</i>	<i>1975-76</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
New houses	13 125	13 460	12 337	12 268	10 902	13 720
Other new dwellings	1 791	1 702	5 522	5 464	7 847	8 843
Total new dwellings	14 916	15 162	17 859	17 732	18 749	22 564
Alterations and additions to dwellings (a)	41	—	—	—	113	—
Hotels, etc.	—	12	—	1 028	—	123
Shops	—	77	224	—	—	—
Factories	356	116	375	305	217	62
Offices	10 871	1 171	7 170	5 389	12 047	6 080
Other business premises	1 472	1 807	533	1 980	7 681	7 798
Education	20 973	24 379	23 934	11 729	14 070	16 588
Religion	—	—	—	—	53	—
Health	5 178	5 449	6 035	899	17 993	4 645
Entertainment and recreation .	942	348	1 088	2 465	2 960	1 762
Miscellaneous	1 725	5 069	3 946	7 570	5 985	16 659
Total other building	41 518	38 428	43 306	31 365	61 006	53 718
Total all building	56 474	53 590	61 165	49 097	79 868	76 282

(a) Valued at \$10 000 and over.

**Value of all Building Completed: Total by Type, Tasmania
(\$'000)**

<i>Type of Building</i>	<i>1975-76</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81(a)</i>
New houses	63 272	84 877	82 565	80 718	87 189	88 700
Other new dwellings	13 858	18 011	23 136	18 742	19 264	22 875
Total new dwellings	77 130	102 888	105 701	99 460	106 452	111 600
Alterations and additions to dwellings (b)	1 684	2 272	4 232	4 776	5 469	6 700
Hotels, etc.	3 828	3 674	5 528	7 464	4 653	2 922
Shops	2 056	6 838	11 979	7 155	14 787	26 927
Factories	6 955	5 186	5 875	7 604	6 026	12 176
Offices	15 390	7 432	11 652	12 988	17 804	9 470
Other business premises	2 736	4 888	4 475	7 001	10 949	15 116
Education	22 711	25 297	27 112	13 244	15 099	18 649
Religion	433	424	1 532	910	680	1 075
Health	5 835	5 879	6 354	1 275	22 000	5 745
Entertainment and recreation .	2 559	3 003	2 593	4 140	6 036	5 194
Miscellaneous	3 791	6 779	5 988	8 410	7 678	18 841
Total other building	66 295	69 402	83 087	70 192	105 711	116 115
Total all building	145 109	174 563	193 019	174 427	217 633	234 400

(a) From 1980-81, figures shown for the value of new houses, total new dwellings, alterations and additions, and total all building have been rounded to the nearest \$100 000.

(b) Valued at \$10 000 and over.

The following table gives details of the total value of all building commenced, completed and under construction for recent years. The items included under 'all building' are specified in the previous two tables.

Value (When Completed) of All Building, Tasmania
(\$m)

Year	Com- menced	Com- pleted	Under construc- tion (a)	Year	Com- menced	Com- pleted	Under construc- tion (a)
1975-76	156.8	145.1	140.5	1978-79	211.4	174.4	206.9
1976-77	178.6	174.6	153.7	1979-80	178.6	217.6	179.5
1977-78	192.3	193.0	161.3	1980-81	209.4	234.4	166.7

(a) At end of period.

Value of Work Done and Changes in Construction Costs

The *value of building work done* represents the estimated value of the building work actually carried out during the periods shown.

As pointed out in the section 'Definitions' all values shown relating to building jobs are *current values* only; no attempt has been made to adjust values to a constant prices basis which would allow for increases in construction costs over the periods shown. The next table and accompanying graph include details of the relevant wholesale price indexes (for Hobart) and of average weekly earnings per employed male unit for Tasmania, which give some perspective to the trends shown in the building value series. In the semi-logarithmic graph, equal rates of change (compound percentage rates of growth) are represented by lines of the same angle of slope to the horizontal axis. Therefore, this graph enables ready comparison between the respective rates of growth of the value of building work done and the two indexes shown.

Value of Building Work Done, Tasmania, Wholesale Price Indexes and Average Weekly Earnings

Particulars	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Value of work done—						
New houses .....\$'000	73 190	85 669	81 487	87 079	84 216	88 800
Other new dwellings ....\$'000	16 063	20 842	22 501	17 344	18 204	23 182
Total new dwellings .\$.000	89 253	106 511	103 988	104 424	102 420	112 000
Alterations and additions to dwellings .....\$'000	1 883	2 407	4 584	5 404	5 451	8 100
Other building .....\$'000	69 414	68 758	90 009	90 989	109 510	118 491
Total building .....\$'000	160 551	177 676	198 581	200 816	217 382	238 500
Percentage increase (a) ...	37.2	10.7	11.8	1.1	8.2	9.7
Wholesale price index—						
Materials used in house building—						
Index number (b)	209.2	235.1	256.7	273.6	304.2	338.2
Percentage increase (a)	16.8	12.4	9.2	6.6	11.2	11.2
Materials used in building other than house build- ing—						
Index number (c)	69.7	77.8	84.1	89.6	100.0	111.6
Percentage increase (a)	17.3	11.6	8.1	6.5	11.6	11.6

continued next page

Value of Building Work Done, Tasmania, Wholesale Price Indexes and Average Weekly Earnings—continued

Particulars	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Average weekly earnings (d)—						
Amount\$	157.80	181.20	199.00	211.60	237.90	270.90
Expressed as index to base						
1966-67 = 100.0 (e)	269.7	309.7	340.2	361.7	406.7	463.1
Percentage increase (a) ...	12.6	14.8	9.8	6.3	12.4	13.9

(a) Over previous year.

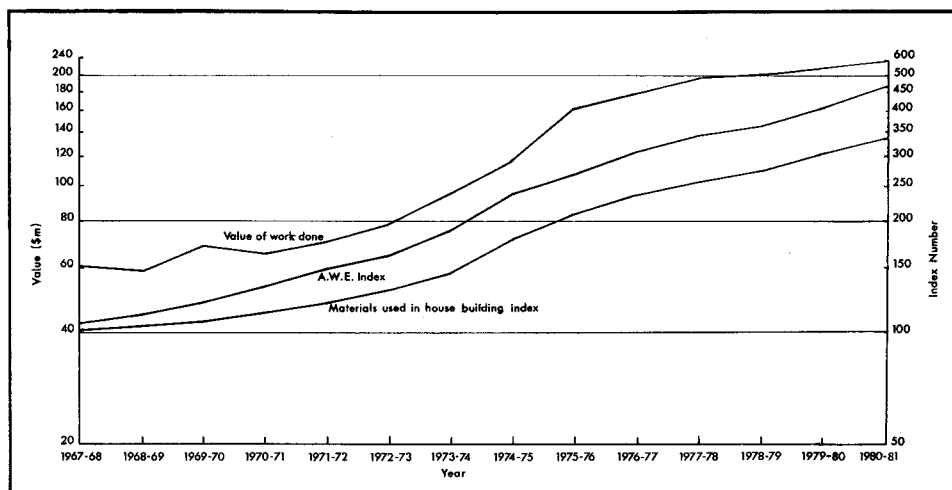
(b) All groups, Hobart; base year 1966-67 = 100.0.

(c) All groups, Hobart: base year 1979-80 = 100.0. Index numbers prior to 1979-80 are derived from an earlier index series with base year 1966-67 = 100.0.

(d) Per employed male unit, Tasmania. Includes earnings of salaried employees, overtime earnings, over-award and bonus payments, etc., in addition to wages at award rates.

(e) Average weekly earnings for Tasmania in 1966-67 were \$58.50.

**Value of all Building Work Done, Tasmania, Wholesale Price Index of Materials Used in House Building (a) and Average Weekly Earnings Index (b)
(Semi-logarithmic (Ratio) Scale Graph)**



(a) All groups, Hobart; base year 1966-67 = 100.0.

(b) Average weekly earnings per employed male unit for Tasmania adjusted to the base: year 1966-67 = 100.0.

FINANCIAL ASSISTANCE FOR HOUSING

The State Department of Housing and Construction—Housing Division

General

Capital funds for Government home construction in Tasmania are made available by way of allocations from the State Loan Fund and advances and grants under the Commonwealth-State Housing Agreement 1981.

The first Commonwealth-State Housing Agreement was entered into in November 1945. Under this agreement Tasmania received \$5 670 000 which it re-paid upon withdrawing from the scheme in August 1950. The State continued to build houses from its own resources until 1956 when it entered into a new agreement with the Commonwealth. This was renewed with minor modifications in 1961 and 1966. By 30 June, 1971, Tasmania's aggregate advances under the scheme were \$89 477 000. In 1971-72 and 1972-73 funds for State housing were provided from the State Loan Fund. Under the Commonwealth-State Housing Agreement of 1973, however, the pre 1971-72 situation was effectively restored with the Commonwealth again providing advances to the States for housing purposes. There were further Housing Agreements in 1978 and 1981. The enabling Commonwealth legislation for these are the *Housing Assistance Acts* 1978 and 1981.

Under the 1978 Agreement the Federal Minister, in consultation with the State Minister, decided the proportion of total money to be used for home purchase assistance and rental assistance. The *Housing Assistance Act* also covered special grants for aged persons' and housing for other persons in need. Grants for Aborigines were introduced in 1979-80.

Under the 1981 Agreement, interest payable to the Commonwealth on rental assistance loans was reduced from 5 per cent to 4.5 per cent. The Agreement provides that funds supplied to the States shall, in the year commencing 1990 be allocated to the States on a per capita basis. Allocations in the preceding years, commencing in 1981-82, shall progress towards that apportionment.

It is provided in the 1981 Agreement that mortgage and rental assistance may be provided to dwelling occupants in the private sector. This assistance was subsequently provided outside the Agreement on a dollar for dollar basis.

Assistance to private renters is administered by the Housing Division and to private mortgagors by the Agricultural Bank of Tasmania. The allocation to the Housing Division for this purpose in 1982-83 is \$400 000.

Funds supplied to the Housing Division under the Commonwealth-State Housing Agreement, and from the State Loan Fund, 1979-80 to 1981-82, were as follows:

Funds for State Government Housing (\$'000)			
Source	1979-80	1980-81	1981-82
Commonwealth-State Housing Agreement —			
Advances (Rental Housing Loans)	6 211	6 462	5 464
Rental Housing Grants	3 235	3 360	2 570
Pensioner Grants	970	976	992
Aboriginal Grants	400	400	527
Total	10 816	11 198	9 553
State Loan Fund	10 700	10 044	10 950
Total	21 516	21 242	20 503

The Division obtains funds from various other sources including sales of rental dwellings and sales of surplus land.

Agricultural Bank of Tasmania—Home Purchase Assistance

The Agricultural Bank of Tasmania is responsible for the administration of funds made available for home purchase assistance under the *Housing Assistance Act* 1981. The new Housing Agreement operating from 1 July 1981 consolidated all past agreements. The State has also provided State Loan Funds for lending under the *Homes Act* 1935.

Interest rates vary from 6 per cent to 12.5 per cent, and as with the term are variable according to need. The new Agreement has the following aims:

- (i) To facilitate home ownership for those able to afford it but not able to gain it through the private market.
- (ii) To provide assistance for home ownership in the most efficient way and thus exclude from eligibility those not in need and minimise continued availability of assistance to those no longer in need. This is to involve provision of assistance that is related to particular recipients' current economic and social circumstances.
- (iii) To enable the States to exercise maximum autonomy and flexibility in the administrative arrangements necessary to achieve (i) and (ii), above.

The following table shows details for recent years:

Agricultural Bank of Tasmania—Advances for Housing (a)						
Particulars	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Advances approved—						
Number	393	366	350	281	386	354
Value (\$'000)	8 355	8 354	7 532	6 551	10 128	9 448
Advances outstanding (b)						
(\$'000)	38 832	43 726	49 187	52 740	58 254	65 056

(a) Excludes advances to building societies.

(b) At end of period.

The Agricultural Bank also administers the allocation of advances to Co-operative Housing Societies; details of such advances and of the Co-operative Housing Societies appear in Chapter 18, 'Private Finance'.

Defence Service Homes Corporation

The *Defence Service Homes Act* 1918 assists certain former and serving members of the Defence Force to acquire a home on concessional terms.

The Defence Service Homes Corporation is, subject to the directions of the Minister for Veterans' Affairs, responsible for the administration of the *Defence Service Homes Act*.

Persons eligible for assistance under the Act include members of the Australian forces and nursing services enlisted or appointed for or employed on active service outside Australia or on a ship of war during the 1914-18 and 1939-45 Wars; persons who served in the warlike operations in Korea or Malaya or who have served on 'special service' as defined in the *Repatriation (Special Overseas Service) Act* 1962; national servicemen who completed their service on or after 7 December 1972; members of the Defence Force who enlisted before 17 August 1977 and served on continuous full-time service, not being service that ended before 7 December 1972, and completed three years effective full-time service; and members of the Defence Force who enlisted on or after 17 August 1977, and who complete six years effective full-time service and enter into a commitment to render further full-time service and who meet certain prescribed conditions. The categories of eligible persons also include the widows and, in some circumstances, the widowed mothers of eligible persons and persons domiciled in Australia and employed in certain sea-going service during the 1914-18 and 1939-45 Wars.

The following loan conditions applied to 30 November 1982:

- Maximum loan : \$25 000;
- Interest rates : 3.75 per cent per annum on the first \$12 000, 7.25 per cent per annum on any excess over \$12 000 up to \$15 000, and 10 per cent per annum on any excess over \$15 000;
- Maximum term : The maximum term permitted by the Act is 45 years or, in the case of the widow or widowed mother of an eligible person, 50 years; but, normally, the repayment period is limited to 32 years.

Operations under the Defence Service Homes Act

Since the inception of the Defence Service Homes Scheme in 1919, 9371 loans have been granted in Tasmania to persons eligible for assistance under the Act.

The following table gives details of the operations under the *Defence Service Homes Act* in recent years:

Defence Service Homes Corporation: Summary of Operations, Tasmania								
Year	Number of Loans Granted				Total	Capital Expendi- ture \$'000	Loan Repay- ments \$'000	Number of Loan Accounts
	Construc- tion of Homes	Purchase of New Homes	Purchase of Previously Occupied Homes	Enlarge- ment of Existing Homes				
1977-78	46	5	75	2	128	1 807	1 590	4 299
1978-79	21	8	71	2	102	1 467	1 951	4 152
1979-80	26	6	74	1	107	1 508	1 951	4 006
1980-81	41	3	86	1	131	2 396	1 833	3 910
1981-82	38	16	140	4	198	4 362	2 013	3 876

Home Deposit Assistance Scheme and Home Savings Grant Scheme

The purpose of the Home Deposit Assistance Scheme is to assist people to buy or build their first homes. In addition, it is the aim of the scheme to increase funds available for housing by encouraging people to save with those institutions that provide the bulk of housing finance. The scheme replaces the Home Savings Grant Scheme which has been terminated.

The *Home Savings Grant Scheme* was introduced in 1964 by the *Homes Savings Grant Act* 1964 which provided grants in respect of first homes acquired by eligible applicants up to 31 December 1976. The *Homes Savings Grant Act* 1976 commenced operation on 1 January 1977 and applied to people who contracted to build or buy their first homes between that date and 2 June 1982.

Applications under the *Homes Savings Grant Acts* 1964 and 1976 may no longer be furnished.

Applications and Grants under the Homes Savings Grant Act 1976, Tasmania

Year	Applications received	Applications approved	Grants approved (\$'000)	Average grant (\$'000)
Jan-June 1977	434	390	250	641
1977-78	1 736	1 644	1 270	773
1978-79	1 844	1 587	1 751	1 103
1979-80	1 670	1 686	2 070	1 228
1980-81	1 752	1 634	2 200	1 346
1981-82	2 556	1 950	2 895	1 485

The *Home Deposit Assistance Scheme* provides for grants to be paid to eligible people, whether single or married, buying or building their first home in Australia on or after 18 March 1982.

To qualify for a grant eligible persons must have held savings continuously in Australia for at least one complete year immediately preceding the date of entry into the contract for purchase or construction of their home. The maximum grant payable for one years savings is \$1 250. To qualify for the full grant of \$2 500, savings must have been

held in Australia continuously for at least two complete years immediately preceding entry into the contract. The amount payable is calculated on a dollar for dollar basis.

Savings must be held in an acceptable form throughout the required savings period. Acceptable forms of savings include: savings held with savings banks, building societies and credit unions, or on fixed deposit with trading banks; and payments made in connection with the purchase of the land or home, or the construction of the home, on or before the contract date.

Additional assistance is available to eligible families with dependent children - a family bonus of \$500 is paid to families with one dependent child and \$1 000 to families with two or more dependent children. The full family bonus is payable in addition to even a minimal basic grant.

The scheme is aimed to assist low to moderate income earners and an income test applies to both single incomes and combined family incomes.

For a home acquired in the 1982-83 financial year, a grant will be made (if all other eligibility requirements are met) if the yearly taxable income of the applicant/s in 1981-82 is less than \$24,900.

Where the taxable income/s exceed \$21 700 the savings-based grant is reduced proportionately, cutting out completely at the upper income limit of \$24 900. It is likely that new income limits will be set for people acquiring their homes in the 1983-84 financial year.

A grant may be made in respect of new or established homes. Applicants may be young or old, married or single, but if an applicant is under 16 years of age, he or she must be married or engaged to be married at the contract date. Before a grant is made at least one applicant must have the right to permanent residence in Australia.

Housing Loans Insurance Corporation

The Housing Loans Insurance Corporation was established by the *Housing Loans Insurance Act* 1966 to administer the Federal Government's Housing Loans Insurance Scheme under which approved lenders may be insured against losses arising from the making of housing loans. An amendment to the Act in 1977 broadened the scope of the Corporation's activities and, in addition to loans for the purchase or construction of homes for owner occupancy, loans for the purchase of vacant land and commercial housing propositions became insurable.

Owner occupancy loans are insurable without limit on loan amount, interest rate or term. Loans for the purchase of vacant land are insurable where the borrower intends to erect his home at a later date. In the commercial field loans for rental housing ranging from single houses or home units to multi-storey structures, together with loans for the purchase and development of land and the building of project housing including home units, are acceptable.

A once only premium is charged by the Corporation at the time a loan is made. With owner occupancy loans comprising 94 per cent and 95 per cent of the valuation of a home the premium is 1.4 per cent of the amount of the loan. Loans from 95 per cent to 100 per cent of valuation carry a loading of 10 per cent on the 1.4 per cent rate. On loans of less than 94 per cent of valuation, the premium falls progressively to 0.1 per cent on loans for less than 76 per cent of valuation. Premium rates for the purchase of vacant land are as for home ownership and attractive rates apply to commercial housing loans.

The Corporation will insure a loan made to enable a borrower to buy or build a house, to buy a home unit, or to discharge an existing mortgage. Loans for alterations and extensions and loans to meet expenses of providing or improving lighting, sewerage, drainage, fences, roads, etc. are also insurable. In addition to loans secured by a registered first mortgage, there is provision for the insurance of second mortgage loans and cover is available for either full-term, fixed-term or five-year loans.

The following table shows the number of loans insured, their purpose and amount, during the past three years:

Housing Loans Insurance Corporation Loans Insured in Tasmania						
Purpose of loan	1979-80		1980-81		1981-82	
	Number	Amount (\$'000)	Number	Amount (\$'000)	Number	Amount (\$'000)
Housing—						
Building a new house						
Purchase of—						
New house	139	4 100	49	1 500	26	800
Established house	960	23 300	782	19 600	518	13 000
Discharge of mortgage	26	1 000	53	1 200	31	700
Home Units	20	500	32	800	16	400
Total	1 145	28 900	916	23 100	591	14 900

CONSTRUCTION INDUSTRY STATISTICS

Statistics in this section were compiled from a sample survey of private sector construction establishments in respect of the year 1978-79. In addition, details were collected on the construction activities of all public sector enterprises engaged in construction activity to a significant extent. This was the first time that the ABS has obtained comprehensive information on the structure of the construction industry. Summary details for Tasmania are included in the 1981 *Year Book* (pp. 366, 367).

Department of Transport and Construction

The Department of Transport and Construction is the Commonwealth Government's design and construction authority. As such, the Department is responsible for advice on and implementation of Commonwealth policies on the building and construction industry as well as the planning, design, construction and maintenance of buildings, engineering facilities and services for the Commonwealth.

Its national works vary widely in scope and diversity, extending from multi-million dollar airports and defence bases to small everyday repairs. In between is a wide range of projects which make a significant contribution to Australia's progress and meet essential public needs such as health facilities, scientific laboratories, schools, telephone exchanges and post offices.

Construction projects, 1982: Projects undertaken during 1982 included repairing and resurfacing the 14/32 runway at the Launceston airport at a final cost of \$1 057 533; extending and strengthening the RPT Apron and access taxiways and the construction of a commuter stand-off apron and taxiway at the Hobart Airport at a total cost of \$1 019 628.

Further References

ABS Publications produced by the Tasmanian Office

- Building Industry, Tasmania (8701.6), annual.
- Building Approvals, Tasmania (8702.6), monthly.
- Building Activity, Tasmania (8703.6), quarterly.
- Estimated Population of Local Government Areas in Tasmania (3201.6), annual.
- Number of Dwellings Commenced (8704.6), quarterly.

ABS Publications produced by the Canberra Office

- Building Activity Australia (8705.0), quarterly.
- Summary Characteristics of Persons and Dwellings, Tasmania (2204.0).
- Private Sector Construction Establishments, Tasmania, 1978-79 (8720.0).
- Construction Activity in the Public Sector, Australia, 1978-79 (8712.0).

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Chapter 12

AGRICULTURE

THE AGRICULTURAL INDUSTRY

General

The Tasmanian rural economy is marked by great diversity and, even allowing for the special regional adaptations made necessary by soil, climate, terrain and altitude, there are many agricultural establishments which individually exhibit a wide range of activities.

For many agricultural products, Tasmania produces considerably more than could be consumed locally and farmers must look outside the State for markets. One consequence of this is that the industry is affected significantly by international currency movements and changes to the degree of protection in overseas markets.

The pattern of farming in Tasmania has maintained an emphasis on rearing livestock for meat production with dairy products and wool also important. Apple growing, while still significant, has reduced its dependence on European markets with a greater proportion of the crop now sold interstate. The growing of vegetables for processing is a significant activity and oil poppies have become an important but fluctuating crop in the last few years.

Historical

The 1976 and earlier editions of the *Year Book* include a summary of agricultural statistics available from as early as 1818.

Agricultural Industry Statistics

Sources of Information

The statistics are principally compiled from census returns of livestock and crop production collected from establishments undertaking agricultural activity in Tasmania at 31 March each year. In conjunction with the general census, supplementary collections from farms are conducted where the harvesting of certain crops has not been completed by 31 March (e.g. apples, potatoes).

Additional information is also obtained from various marketing and other authorities and from a number of entirely separate collections covering such data as slaughtering and meat and dairy production.

Period Covered

Data relating to area sown, production and number of establishments growing crops are generally for the season ended 31 March. In cases where harvesting has not been completed by 31 March (e.g. potatoes), total production is nevertheless collected and included in published figures. Livestock numbers are also reported as at 31 March.

The census is conducted at 31 March (rather than 30 June) as it is considered to be the most appropriate date for all states to draw a line between the activities of two successive seasons.

The following tables give an indication of the seasonality of agricultural production in Tasmania. It should be noted that variations from the periods specified occur owing to variety of seed, district, seasonal conditions, scheduling of shearing and harvesting.

Times of Planting and Harvesting Principal Crops, Tasmania

Crop	Time of planting	Harvesting period	Crop	Harvesting period
Cereals—			Fruit—	
Barley	Sept. to Nov.	Feb. to Mar.	Apples	Feb. to May
Oats	Mar. to Oct.	Nov. to Mar.	Apricots	Jan. to Feb.
Wheat	May to Sept.	Jan. to Feb.	Peaches	Jan. to Feb.
Vegetables—			Pears	Feb. to April
Beans, French and runner	Sept. to Jan.	Feb. to Apr.	Plums	Jan. to Feb.
Peas, green	June to Dec.	Nov. to Feb.	Raspberries	Dec. to Jan.
Potatoes—			Currants	Jan. to Feb.
Early	May to July	Oct. to Nov.	Gooseberries	Nov. to Dec.
Late	Aug. to Nov.	Feb. to June	Strawberries	Nov. to Jan.
Tomatoes	Oct. to Nov.	Feb. to April		
Other crops—				
Hops .....	..	Feb. to Mar.		
Field peas	July to Sept.	Jan. to April		
Oil poppies	Aug. to Oct.	Jan. to Feb.		

Main Shearing, Lambing and Slaughtering Periods, Tasmania

Activity	Period
Shearing (a)	August to January
Lambing—	
Spring	August to October
Autumn and winter	March to July
Slaughtering for export—	
Lambs (a)	November to March

(a) The period shown is that in which the seasonal activity is more pronounced.

Agricultural Establishment—Definition

Prior to 1975-76 an 'agricultural establishment' was defined as 'a piece of land, one hectare or more in extent, used for the production of crops or for the raising of livestock and the production of livestock products'. Establishments of less than one hectare, on which commercial agricultural pursuits were carried out (e.g. nurseries, poultry farms, etc.) were also generally included.

It was recognised that many small holdings included under this definition were not engaged in agriculture on a 'commercial' scale and that the contribution such 'sub-commercial' holdings made to item totals was, in most cases, negligible.

With the creation of a new register of agricultural businesses in 1974-75 the opportunity was taken to streamline the Agricultural Census by redefining the basic Census unit; an establishment undertaking agricultural activity has been included in the statistics if the enterprise operating the establishment had, or was expected to have, an estimated value of agricultural operations of \$1 500 or more during the current season.

The estimated value of operations for 1980-81 was obtained for each establishment by applying unit values to the commodity data reported on the 1979-80 Agricultural Census returns. The unit values used were averages for the three years 1977-78 to 1979-80 to reduce the effects of short-term fluctuations in prices. In the case of crops, both area and production were valued, and for livestock, both animals sold during the year and numbers on farms at 31 March were valued. This was done to reduce the effects of variations in average yields and to give due acknowledgement to any business that undertook agricultural operations but did not actually sell any agricultural commodities during the year (due to factors such as crop failures or unfavourable market conditions).

The value of operations concept is merely a convenient way of objectively determining: (i) the relative scales of activity of establishments undertaking agricultural

activity so as to exclude the sub-commercial ones; and (ii) the industry classification of establishments. It is *not* a method of calculating *actual* gross income of farms.

The total effect of the new definition was not felt in 1975-76 as a resistance factor had been introduced to prevent rural establishments of 10 hectares or more being excluded from the tabulations even if their value of agricultural operations were less than \$1 500. However, these establishments were excluded from the 1976-77 tabulations if their value of agricultural operations remained below \$1 500. The exclusion of these establishments accounted for most of the total decrease of approximately 2 000 (25 per cent) in the number of establishments in the 1976-77 tabulations from the previous year. A further revision for 1978-79, to recognise the activities of all beekeepers, involved the inclusion of beekeepers without rural land. These beekeepers were previously excluded from establishment counts, although their beekeeping activities were included.

An analysis undertaken to investigate the possible effect of the new definitions, and the consequent exclusion of a large number of 'sub-commercial' establishments, on census totals suggests that, except for a few minor crops, the effect on data is minimal.

Classification of Agricultural Enterprises by Industry

Creation of the new register of agricultural businesses (enterprises) and the application of the Australian Standard Industrial Classification to the agricultural sector has enabled the production of a classification of agricultural enterprises by size and industry. (An *enterprise* is defined as that unit comprising all operations in Australia of a single, operating legal entity. See also 'Economics Censuses and Surveys' in Chapter 18 for an explanation of the concepts of 'enterprise' and 'establishment'.) The industry class of an agricultural enterprise is determined basically according to the predominant activity as measured after the application of unit values to commodity data.

The following table shows for 1980-81 all agricultural enterprises in Tasmania with an estimated value of operations of \$1 500 or more, classified according to industry class and estimated value of operations:

Agricultural Enterprises (a) Classified According to Industry Class and Estimated Value of Operations, Tasmania, 1980-81
(Number)

Industry class	Estimated value of operations (\$'000)						Total
	2 to 9	10 to 19	20 to 39	40 to 59	60 to 99	100 and over	
Sheep-meat cattle	216	126	131	76	77	113	739
Sheep	345	194	225	107	108	114	1 093
Meat cattle	640	240	166	35	35	15	1 131
Milk cattle	85	190	438	313	174	59	1 259
Pigs	46	39	32	13	9	12	151
Orchard and other fruit	74	38	68	43	68	92	383
Vegetables—potatoes	13	25	48	72	99	77	334
Vegetables—other	29	27	39	20	35	40	190
Other	140	101	80	29	24	31	405
Total	1 588	980	1 227	708	629	553	5 685

(a) An agricultural enterprise may comprise more than one establishment which undertakes agricultural activity. Column headings have been rounded to the nearest thousand dollars.

Size of Agricultural Establishments

In the following table, rural establishments have been classified to size groups. The table shows the number and area of rural establishments in these groups for each statistical division.

Classification of Rural Establishments by Size, Tasmania, 1980-81

Statistical Division	Under 50 ha	50- 99 ha	100- 299 ha	300- 999 ha	1 000 ha & over	Total
<i>Number of establishments—</i>						
Hobart	145	40	62	32	5	284
Southern	340	268	363	257	215	1 443
Northern	389	377	735	403	191	2 095
Mersey-Lyell	736	689	733	181	27	2 366
Tasmania	1 610	1 374	1 893	873	438	6 188
<i>Area of establishments ('000 ha)—</i>						
Hobart	2	3	10	16	10	42
Southern	8	19	62	136	610	837
Northern	11	27	128	213	595	975
Mersey-Lyell	21	50	117	89	90	367
Tasmania	43	100	317	456	1 306	2 220

Number of Establishments with Crops or Livestock

At 31 March 1981 there were 6 188 establishments which satisfied the definition of an agricultural establishment (see earlier this Chapter). The following table shows the number of establishments growing selected principal crops or carrying livestock. This gives some indication of farming activities on a broad basis only, since the same establishment may be included more than once in the figures (in an extreme case, one establishment could be included 11 times).

Number of Establishments Growing Principal Crops or Carrying Livestock, Tasmania

Particulars	1975-76(a)	1976-77(a)	1977-78	1978-79	1979-80	1980-81
Number of agricultural establishments (at 31 March)	8 214	6 154	6 141	(a)6 142	6 180	6 188
Establishments—						
Growing—						
Grain (b)—						
Barley	386	358	385	398	352	325
Oats	r 115	197	151	280	221	253
Wheat	47	53	40	43	50	44
Hops	28	26	22	22	r 21	21
Vegetables (c)—						
Potatoes	r 663	684	636	599	547	564
Onions	66	43	48	52	r 73	78
Fruit (c)—						
Orchard tree	425	398	367	373	361	359
Small fruit	211	168	169	162	r 181	186
Carrying—						
Cattle	7 229	5 541	5 428	5 186	5 056	5 063
Sheep	3 579	3 062	3 127	3 207	3 288	3 351
Pigs	974	900	851	775	690	569

(a) Not comparable with previous years, see definition of 'Agricultural establishment' given earlier.

(b) Ten hectares and over.

(c) 0.5 hectares and over.

Land Utilisation on Agricultural Establishments

Establishments undertaking agricultural activity at present occupy 32.5 per cent of Tasmania's area of 6 830 000 hectares; details of land utilisation follow:

Land Utilisation on Agricultural Establishments, Tasmania
(Hectares)

Type of usage	1977-78	1978-79	1979-80	1980-81
Crops (excluding sown pastures harvested) (a)	69 686	80 439	77 624	83 203
Sown pastures (b)	909 862	904 261	895 220	902 679
Balance (used mainly for grazing)	1 301 729	1 247 018	1 256 310	1 234 454
Total area of all establishments	2 281 277	2 231 718	2 229 154	2 220 336

(a) Excludes area of sown pasture harvested; includes orchards and small fruits.

(b) Includes area harvested. Lucerne is classified to sown pastures.

Definition of 'Crops'

'Crops' as specified in the previous table refers only to cultivated fields and orcharding land. Also, the total area of land sown or planted to crops is shown irrespective of whether the whole area was subsequently harvested or whether a portion or the whole of a crop failed and was not harvested. Where two successive crops are grown on the same land during the one season, the actual area of crops will exceed the area of land used for cropping. Further it is reasonable to regard as a crop the yield obtained from harvesting sown pastures. The next table shows the total area of crops, using this wider definition and taking account of double-cropping:

Total Area of Crops, Tasmania
(Hectares)

Area	1977-78	1978-79	1979-80	1980-81
Area used for crops (a)	69 686	80 439	77 624	83 203
Area double-cropped	2 299	2 637	582	731
Sown pastures harvested (b)	49 081	70 257	61 087	66 211
Total area of crops	121 066	153 333	139 293	150 145

(a) As shown in previous table.

(b) Includes lucerne.

Definition of 'Sown Pasture'

Sown pasture is pasture which has been developed by the sowing of non-indigenous grasses or legumes. The next table shows the total area of sown pasture and distinguishes between areas cut for various purposes and areas simply grazed:

Sown Pasture, Tasmania: Classification of Total Area
(Hectares)

Particulars	1977-78	1978-79	1979-80	1980-81
Pasture harvested—				
Hay	46 480	65 835	57 689	61 555
Seed	922	1 958	1 436	1 730
Green feed or silage	1 679	2 464	1 962	2 926
Total pastures harvested	49 081	70 257	61 087	66 211
Pastures not harvested	860 781	834 004	834 133	836 468
Total sown pasture	909 862	904 261	895 220	902 679

CROPS

The summary table below shows the area devoted to principal crop types. The table shows that the area of pasture crops (harvested for hay, seed, green feed and silage) varies significantly from season to season.

Area of Principal Crops, Tasmania: Summary
(Hectares)

<i>Crop</i>	1977-78	1978-79	1979-80	1980-81
Section 1 (a)—				
Cereals for grain	17 332	21 901	20 122	21 356
Legumes mainly for grain	1 074	1 307	1 261	701
Crops for hay (b)	2 121	2 200	1 972	2 533
Crops for green feed or silage (c)	26 622	30 075	32 881	36 151
Fruit—Orchard tree	3 071	3 109	3 088	3 026
Berry and small	449	442	513	520
Vegetables for sale for human consumption ..	12 224	13 010	13 901	14 458
Hops	567	578	620	672
Oil poppies	7 969	8 739	1 554	3 350
Other crops (d)	555	1 717	2 293	1 168
Total section 1 (e)	71 985	83 076	78 206	83 934
Section 2—				
Pasture harvested for hay, seed, green feed or silage (f)—				
Pasture hay	46 480	65 835	57 689	61 555
Pasture seed	922	1 958	1 436	1 730
Pasture harvested for green feed or silage ..	1 679	2 464	1 962	2 926
Total section 2	49 081	70 257	61 087	66 211
Total area of crops	121 066	153 333	139 293	150 145

(a) Section 1 excludes pastures harvested for hay, seed, green feed or silage; details for these are given in Section 2.

(b) Excludes pasture hay; see Section 2.

(c) Includes vegetables for stock feed but excludes pastures harvested for green feed or silage; see Section 2.

(d) Includes grapes, lavender, vegetables for seed, nurseries, cut flowers, lupins and mint.

(e) Includes land double-cropped; in 1980-81 area involved was 731 hectares.

(f) Includes lucerne harvested.

Details of individual crops, their area, production and yield per hectare, are shown in the next table:

Crops: Area, Production and Yield per Hectare, Tasmania, 1980-81

<i>Crop</i>	<i>Area (hectares)</i>	<i>Production</i>	
		<i>Total</i>	<i>Yield per hectare</i>
Cereals for grain—			
Barley	10 056	18 307	1.8
Oats	8 871	11 146	1.3
Triticale	903	1 151	1.3
Wheat	1 614	2 545	1.6
Legumes mainly for grain—			
Horse beans	56	89	1.6
Lupins	56	96	1.7
Field peas—			
Blue	413	587	1.4
Grey and other	176	208	1.2

continued next page

Crops: Area, Production and Yield per Hectare, Tasmania, 1980-81—continued

Crop	Area (hectares)	Production	
		Total	Yield per hectare
Hay—			
Pasture (incl. lucerne)	61 555	241 817	3.9
Oaten	2 148	6 461	3.0
Other	385	1 070	2.8
Orchard tree fruit—			
Apples	n.a.	76 033	n.a.
Apricots	n.a.	295	n.a.
Pears	n.a.	2 095	n.a.
Berry and small fruit—			
Bearing—			
Currants (black and red)	252	772	3.1
Gooseberries	3	11	4.2
Loganberries	18	126	7.1
Raspberries	96	416	4.4
Strawberries	20	131	6.6
Non-bearing	131	..	..
Vegetables for human consumption—			
Beans, French and runner	1 263	10 319	8.2
Peas, green (a)—			
For processing	7 097	26 547	3.7
Sold in pod	10	11	1.1
Potatoes	4 335	155 965	36.0
Turnips, swede and white	179	2 289	12.8
Other	1 574	..	..
Pasture seed (incl. lucerne)	1 730	575	0.3
Other crops—			
Hops (b)	672	1 558	2.3
Oil poppies	3 350	n.p.	n.p.

(a) Ex-shell weight.

(b) Production is expressed as dry weight.

Principal Crops

Although data on area and production of crops are compiled, to give totals for each municipality, information in subsequent parts of this chapter dealing with geographical distribution is presented only in statistical divisions. The Hobart and Southern Division totals have been combined since the Hobart Division is predominantly urban in character. A description of the Tasmanian Statistical Divisions and Sub-divisions appears in Chapter 2.

Summary of Principal Crops

The following tables, which summarise the area of selected principal crops and give details of production for recent years, illustrate the importance of potatoes, green peas, French and runner beans for processing, and the declining importance of orchards and small fruit. Oil poppies have become an important crop in recent years but details are not included as the figures relating to production are not available for publication.

Selected Principal Crops, Tasmania: Area and Production

<i>Crop</i>	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
<i>Area (Hectares)</i>						
Barley for grain	11 475	11 644	11 444	11 938	10 558	10 056
Oats for grain	3 924	6 387	4 616	8 564	7 489	8 781
Wheat for grain	1 644	1 980	1 257	1 366	1 972	1 614
Total hay	71 567	72 001	48 601	68 035	59 661	64 088
Field peas	447	415	719	993	960	589
Pasture seed	628	1 018	922	1 958	1 436	1 730
Hops (a)	513	587	567	578	620	672
Beans, French and runner	1 054	1 277	1 143	1 405	1 207	1 263
Peas, green—						
For processing	5 525	6 363	6 221	6 476	6 997	7 097
Sold in pod	13	11	7	8	7	10
Potatoes	3 354	3 705	3 592	3 646	4 115	4 335
Orchard (tree) bearing (b)—						
Apples	2 947	2 741	2 601	2 693	2 661	n.a.
Pears	145	114	103	110	99	n.a.
Berry and small fruit, bearing—						
Currants (black and red)	208	207	209	203	245	252
Loganberries	37	23	24	24	16	18
Raspberries	139	115	102	99	98	96
Strawberries	11	15	21	18	20	20
<i>Production (Tonnes)</i>						
Barley for grain	18 389	24 571	19 403	26 971	17 304	18 307
Oats for grain	3 497	8 801	4 279	11 826	7 937	11 146
Wheat for grain	1 728	3 929	1 545	2 867	3 727	2 545
Total hay	327 239	344 549	172 348	304 847	249 766	249 348
Field peas	586	765	761	1 850	1 056	795
Pasture seed	141	246	172	722	442	575
Hops (c)	1 129	1 330	1 201	1 457	1 183	1 558
Beans, French and runner	10 077	10 996	8 296	13 464	6 618	10 319
Peas, green (d)—						
For processing	20 680	31 632	27 223	30 171	25 608	26 547
Sold in pod	8	8	7	8	7	10
Potatoes	95 614	112 269	107 240	124 385	136 197	155 965
Apples	68 712	71 781	63 444	85 230	74 434	76 033
Pears	2 853	1 434	1 913	2 643	2 339	2 095
Currants (black and red)	470	575	681	787	1 102	772
Loganberries	154	222	142	138	167	126
Raspberries	656	563	552	424	513	416
Strawberries	72	84	84	104	108	131

(a) Includes areas not in full bearing.

(b) Area details by variety are not available for 1980-81.

(c) Dry weight.

(d) Ex-shell weight.

Cereals for Grain

Barley has become the most important cereal grain crop, the area sown having stabilised after a steady increase up to 1970-71. The area of oats for grain during 1980-81 increased by 17 per cent from 1979-80, while the area of wheat for grain was 18 per cent down on the 1979-80 figure. Triticale, used mostly for feeding to poultry, became a significant cereal grain crop during 1980-81. The following table shows the Tamar statistical sub-division as the major grain growing district with the Southern Statistical Division not far behind.

**Area of Cereals for Grain by Statistical Division, 1980-81
(Hectares)**

Cereals for grain	Hobart and Southern	Northern			Mersey-Lyell			Total Tasmania
		Tamar (a)	North Eastern (a)	Total	North Western (a)	Western (a)	Total	
Barley	2 435	4 821	751	5 572	2 049	—	2 049	10 056
Oats	3 284	2 981	2 409	5 390	107	—	107	8 781
Triticale	244	94	16	110	63	—	63	417
Wheat	690	554	295	849	75	—	75	1 614
Other	614	241	24	265	26	—	26	905
Total	7 267	8 691	3 495	12 186	2 320	—	2 320	21 773

(a) Statistical sub-division.

Legumes Mainly for Grain

The following table illustrates the geographical distribution of legumes mainly grown for grain and shows the Tamar Statistical Sub-division to be the major producing area:

**Area of Legumes Mainly for Grain by Statistical Division, 1980-81
(Hectares)**

Crop	Hobart and Southern	Northern			Mersey-Lyell			Total Tasmania
		Tamar (a)	North Eastern (a)	Total	North Western (a)	Western (a)	Total	
Horse beans	—	51	—	51	5	—	5	56
Lupins	—	20	35	55	1	—	1	56
Field peas—								
Blue	—	379	19	398	15	—	15	413
Grey, etc.	56	47	—	47	73	—	73	176

(a) Statistical sub-division.

Hay and Green Feed

The following table shows the geographical distribution of hay and green feed crops:

**Area of all Hay and Crops for Green Feed or Silage by Statistical Division, 1980-81
(Hectares)**

Crop	Hobart and Southern	Northern			Mersey-Lyell			Total Tasmania
		Tamar (a)	North Eastern (a)	Total	North Western (a)	Western (a)	Total	
Hay—								
Pasture	8 544	18 901	10 525	29 426	23 580	5	23 585	61 555
Oaten	635	936	240	1 176	337	—	337	2 148
Other	220	72	49	121	44	—	44	385
Total	9 399	19 909	10 814	30 723	23 961	5	23 966	64 088
Crops for green feed or silage (b) .	15 608	9 435	7 853	17 288	6 039	142	6 181	39 077

(a) Statistical sub-division.

(b) Includes vegetables for stock feed and pasture harvested for green feed or silage.

The North Western Sub-division, with the largest area devoted to sown pastures, produces 37 per cent of the State's hay. Its predominance in area under hay and green feed crops can be related to the fact that it carries 36 per cent of the State's cattle and is the principal dairying area.

The main green feed crops are oats and turnips (approximately 72 per cent of the total green feed area); other green feed crops include rape, chou moellier, barley, millet, ryecorn and wheat.

Orchard Tree Fruit and Berry and Small Fruit

Orcharding is heavily concentrated in and around the Huon Valley (Southern Statistical Division); the other main area is in the Tamar Valley (Northern Division). Berry and small fruit growing is almost entirely confined to the Derwent and Huon Valleys.

**Area of Orchard Tree and Berry and Small Fruit by Statistical Division, at 31 March 1981
(Hectares)**

Type	<i>Hobart and Southern</i>	<i>Northern</i>			<i>Mersey-Lyell</i>			<i>Total Tasmania</i>
		<i>Tamar (a)</i>	<i>North Eastern (a)</i>	<i>Total</i>	<i>North Western (a)</i>	<i>Western (a)</i>	<i>Total</i>	
Orchard tree fruit	2 290	451	8	459	276	—	276	3 026
Berry and small fruit ..	445	6	21	27	48	—	48	520

(a) Statistical sub-division.

The following table shows the number and variety of fruit trees grown in Tasmania over recent years:

**Fruit Trees, Tasmania
(⁰⁰⁰)**

<i>Variety</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>
Apples	1 261	1 200	1 206	1 210	1 212	1 174
Pears	49	46	47	45	42	38
Apricots	26	29	32	29	30	29
Peaches	2	2	3	2	2	2
Nectarines	2	2	2	(a) 13	2	2
Cherries	7	6	6		7	8
Plums and prunes	2	2	2		2	2

(a) Separate details of the number of trees for cherries, nectarines and plums and prunes were not collected in 1980.

With the continued decline in apple production, the gross value of the 1981 season's apple crop represented only 21 per cent of the total gross value of all crops (see page 370). The next table gives recent details of area, production and average yield:

Apples: Area and Production, Tasmania

<i>Season</i>	<i>Area</i>		<i>Number of trees</i>		<i>Production</i>		
	<i>Bearing</i>	<i>Non-bearing</i>	<i>Bearing</i>	<i>Non-bearing</i>	<i>Total</i>	<i>Yield</i>	
						<i>Per bearing hectare</i>	<i>Per bearing tree</i>
	<i>hectares</i>	<i>hectares</i>	<i>'000</i>	<i>'000</i>	<i>tonnes</i>	<i>tonnes</i>	<i>kg</i>
1976	2 947	385	1 220	160	72 529	24.7	60
1977	2 741	311	1 132	128	71 781	26.2	63
1978	2 601	261	1 091	110	63 444	24.4	58
1979	2 693	197	1 124	82	85 230	31.6	76
1980	2 661	216	1 119	91	74 434	28.0	67
1981	n.a.	n.a.	1 086	126	76 033	n.a.	70

Economic Problems: In recent years, instability in overseas markets and shipping costs have prompted the introduction of assistance to apple growers through schemes providing a stabilisation price for each variety of apple exported at risk to European markets. In the 1971 export season the Federal Government's *Apple and Pear Stabilisation Act* came into effect. Under this Act a support price was decided upon for each variety and, depending on the average market return for that variety, payments either into or from the fund were calculated. Net amounts paid for apples under this scheme were: 1971-72, \$1 872 000; 1972-73, \$1 798 000; 1973-74, \$1 918 000; 1974-75, \$1 733 000; 1975-76, \$2 540 000; 1976-77, \$527 000; 1977-78, \$258 000; 1978-79, \$1 962 000; 1979-80, \$204 000 and 1980-81, \$2 243 000.

Since the 1974 season further subsidies have been provided under the *Apple Industry (Assistance) Act*. This Act, which effectively lifts the limit on payments under the stabilisation scheme, provides for equal contributions from the Federal and State Governments; however, in 1975-76 the Tasmanian Government paid an extra \$284 000. The total payments under this Act have been: 1973-74, \$3 180 000; 1974-75, \$1 144 000; 1975-76, \$742 000; 1976-77, \$78 000; 1977-78, \$178 000; 1978-79, \$1 923 000; 1979-80, \$94 000 and 1980-81, \$1 030 000.

With the introduction of a new underwriting scheme from the 1981 season, stabilisation payments for apples have been phased down and payments for pears terminated. The new scheme is wholly funded by the Commonwealth Government with the level of support calculated at 95 per cent of the weighted f.o.b. return per box of apples or pears to all markets in the immediately preceding four seasons.

As shown earlier in this chapter, the number of holdings with at least 0.5 hectares of orchard tree fruit (apples, pears, apricots, etc.) was only 359 at 31 March 1981. While this is substantially below the number of holdings with orchard trees ten years ago (1 007 holdings at 31 March 1971), it has been stable at approximately 360 holdings since 1978

A wide variety of applies is produced in Tasmania but many only in small quantities. Of the total production of 76 033 tonnes in 1981, two varieties accounted for 41 per cent (granny smith, 21 per cent and democrat, 20 per cent), golden delicious, jonathan, red delicious and sturmer pippin accounted for a further 44 per cent between them.

In the period from 1948-49 State production of berry and small fruit has dropped by over three quarters. In spite of this Tasmania is still the principal producer of raspberries and black currants in Australia.

Principal Small Fruits: Area and Production, Tasmania

Year	Currants (black and red)		Loganberries		Raspberries		Strawberries	
	Bearing area	Pro- duction	Bearing area	Pro- duction	Bearing area	Pro- duction	Bearing area	Pro- duction
	hectares	tonnes	hectares	tonnes	hectares	tonnes	hectares	tonnes
1948-49 (a)	812	2 735	86	380	844	3 449	101	395
1975-76	208	470	37	154	139	656	11	72
1976-77	207	575	23	222	115	563	15	84
1977-78	209	681	24	142	102	552	21	84
1978-79	203	787	24	138	99	424	18	104
1979-80	245	1 102	16	167	98	513	20	108
1980-81	252	772	18	126	96	416	20	131

(a) Representative year from period when small fruit areas were at their highest level.

Vegetables for Sale for Human Consumption

The concentration of vegetable growing in certain areas of the State is illustrated in the following table:

**Vegetables for Sale for Human Consumption (a)
Area Under Selected Crops by Statistical Division, 1980-81
(Hectares)**

Crop	Hobart and Southern	Northern			Mersey-Lyell			Total Tasmania
		Tamar (b)	North Eastern (b)	Total	North Western (b)	Western (b)	Total	
Beans, French and runner	—	83	77	160	1 102	—	1 102	1 262
Peas, green	14	2 593	445	3 038	4 055	—	4 055	7 107
Potatoes	200	138	394	532	3 604	—	3 604	4 335
Onions	2	23	43	66	364	—	364	431
Other vegetables	190	165	57	222	908	2	910	1 322
Total	406	3 002	1 016	4 018	10 033	2	10 035	14 458

(a) Includes vegetables for processing.

(b) Statistical sub-division.

Hops

The almost universal use of the 'Pride of Ringwood' hop variety has led to a general increase in per hectare yields in recent years. As well, this variety has a higher percentage of usable resin than the older types and, at the same time, more efficient extraction methods have been devised. This has led to a changed disposal pattern with more emphasis on export, although export markets have not been particularly rewarding recently and stockpiling has occurred.

The majority of hops produced are seedless (through the exclusion of male plants) in order to meet changing brewery demand and the market for hop extract. Hops for shipment are dried, hammer-milled, compressed into pellets and put into airtight containers that are either vacuum sealed or nitrogen flushed before sealing. This reduces resin losses due to oxidation, allows storage without refrigeration and decreases the bulk to be shipped.

Tasmania's total production of 1 158 tonnes in 1980-81 was 67 per cent of the total Australian hop production of 2 309 tonnes. The next table shows details of area, production and gross value over a six-year period:

Hops, Tasmania: Area, Production and Gross Value

Season	Number of growers	Total area	Production		
			Total (a)	Yield per hectare (a)	Value
		hectares	tonnes	kg	\$'000
1975-76	28	513	1 129	2 200	1 575
1976-77	26	587	1 330	2 266	2 254
1977-78	22	565	1 201	2 126	2 351
1978-79	22	578	1 457	2 521	3 209
1979-80	22	620	1 183	1 908	3 021
1980-81	21	672	1 558	2 318	4 678

(a) Dry weight.

Oil Poppies

Initially, oil poppies were grown on the mid North-West Coast; they more recently have been grown in other parts of the State, although adverse weather conditions, particularly excessive rain, have proved to be a problem in some areas.

In 1980-81 the total area of oil poppies was 3 350 hectares compared with 1 554 hectares in the previous year and 8 739 hectares in 1978-79, the distribution being: Hobart and Southern statistical divisions, 477 hectares; Northern, 856 hectares; and Mersey-Lyell, 2 017 hectares.

The sudden decrease in the area of oil poppies in 1979-80 was caused by the closure of the United States' market to the Tasmanian product. Subsequent negotiations reopened this market bringing a recovery to the industry.

Oil poppy growing provides the raw material in the production of codeine and, within Australia, is at present restricted to Tasmania where two processing plants now operate.

Production figures are not available for publication.

Pasture Seed

The geographical distribution (in hectares) of areas yielding pasture seed in 1980-81 was as follows: Hobart and Southern, 327; Northern, 1 288; Mersey-Lyell, 115; total, 1 730. The area of pasture seed fluctuates widely depending on farming conditions; in 1975-76, 628 hectares yielded seed.

The main seed varieties produced on Tasmanian farms during the past six years are listed in the following table:

<i>Type of Grass</i>	<i>Pasture Seed Production (a)</i>					
	<i>(kg)</i>					
	<i>1975-76</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Clover—White	6 460	6 643	765	10 606	8 533	300
Other	1 815	1 060	1 050	880	7 275	50
Ryegrass—Perennial	68 432	112 718	60 151	351 751	293 313	420 322
Hybrid	4 740	5 620	5 440	17 920	32 139	19 552
Italian	36 813	74 643	91 715	283 910	72 011	84 470
Cocksfoot	13 751	32 433	12 320	42 305	13 740	44 619
Other grasses	8 543	12 570	1 000	14 420	14 679	5 630
Total	140 554	245 687	172 441	721 792	441 690	574 943

(a) Includes all pasture seed harvested, whether as a separate crop or from an area sown to grain crops.

LIVESTOCK

Introduction

This subject is dealt with in two parts: (i) the first deals with numbers of livestock on establishments undertaking agricultural activity; and (ii) a second part, 'Livestock Products'.

The first part needs no comment but the second part ('Livestock Products') requires explanation. In relation to the various types of livestock, the following products are included:

Cattle—meat, milk, butter, cheese.

Sheep—meat, wool.

Pigs—meat.

Poultry—meat, eggs.

Butter, meat and cheese, although regarded as manufacturing industry products, are included in the later section 'Livestock Products', because the pattern and scale of livestock farming is closely linked to the processing of these products.

Number of Livestock on Agricultural Establishments

The following summary table shows the number of livestock on agricultural establishments for recent years:

Livestock on Agricultural Establishments, Tasmania, at 31 March
(^{'000})

Year	Cattle	Sheep	Pigs
1976	909.2	4 248.9	69.8
1977	818.8	4 014.6	64.6
1978	733.3	3 969.3	64.2
1979	656.9	4 156.6	60.8
1980	649.3	4 245.4	63.5
1981	658.5	4 380.9	54.5
	%	%	%
Tasmanian numbers as proportion of Australian total (1980-81)	2.6	3.3	2.2

Cattle

Classification

The traditional way of classifying cattle has been to call them either 'dairy' or 'beef' cattle but this has led to confusion since the terms may refer to either *purpose* or *breed*. In the period 1942-43 to 1962-63, the annual farm census required this dissection but the terms were not defined. From 1963-64 the cattle groupings have been organised to distinguish between: (i) bulls classified by *breed*; (ii) 'house cows' specified separately; and (iii) all other cattle classified according to *purpose* (i.e. milk production or meat production). The results of the 1979-80 and 1980-81 farm censuses are given in the following table. This closely follows the lay-out of the collection form.

Classification of Cattle on Agricultural Establishments at 31 March, Tasmania
(^{'000})

Description	1980	1981
<i>Milk Cattle</i>		
Dairy breed bulls used or intended for service—		
Bulls 1 year and over	2.0	2.0
Bull calves under 1 year intended for service	0.8	0.7
Dairy cows and heifers—		
Cows, in milk and dry	103.2	98.8
Heifers, 1 year and over	24.6	23.6
Heifer calves, under 1 year	24.0	22.8
House cows (in milk and dry) and heifers	1.4	1.5
Total milk cattle	155.9	149.4

Classification of Cattle on Agricultural Establishments at 31 March, Tasmania
(^{'000})—continued

<i>Description</i>	<i>1980</i>	<i>1981</i>
<i>Meat cattle</i>		
Beef breed bulls used or intended for service		
Bulls 1 year and over	9.7	9.3
Bull calves under 1 year intended for service	3.6	2.9
Other cattle and calves (not included above) mainly for meat production—		
Cows and heifers, 1 year and over	240.6	243.8
Heifer calves, under 1 year	68.2	72.2
Other calves under 1 year	84.6	88.9
Other cattle, 1 year and over	86.6	92.1
Total meat cattle	493.3	509.1
Total cattle and calves for all purposes	649.3	658.5

The geographical distribution of establishments with cattle is shown below:

Distribution of Cattle in Statistical Divisions, 31 March 1981

<i>Statistical division or sub-division</i>	<i>Number of establish- ments with cattle no.</i>	<i>Total dairy cattle (a) (^{'000})</i>	<i>Total beef cattle (b) (^{'000})</i>	<i>Total cattle (^{'000})</i>
Hobart and Southern	1 195	9.3	99.0	108.4
Northern—				
Tamar	1 161	34.7	112.0	146.7
North Eastern	600	17.9	120.8	138.7
Total	1 761	52.6	232.8	285.4
Mersey-Lyell—				
North Western	2 101	87.5	176.2	263.7
Western	6	—	1.1	1.1
Total	2 107	87.5	177.3	264.8
Total Tasmania	5 063	149.4	509.1	658.5

(a) Includes dairy breed bulls and bull calves, cows and heifers used or intended for production of milk and cream for sale, and house cows.

(b) Includes beef breed bulls and bull calves, and other cattle and calves mainly for meat production.

The change in classification of cattle (outlined above) makes it impossible to compare, in full detail, the description of cattle in 1964-65 and subsequent years with descriptions reported in previous years but the following table is compiled to show broad groups regarded as generally comparable:

Description of Cattle on Agricultural Establishments at 31 March, Tasmania

Year	Number of establishments with cattle	Bulls (1 year and over) (^{'000})	Cows and heifers (1 year and over) (^{'000})	Calves (under 1 year) (^{'000})	Other (^{'000})	Total cattle (^{'000})
1950	9 759	6.2	158.4	60.6	49.5	274.7
1955	9 668	7.0	194.0	78.3	40.1	319.4
1960	9 031	7.2	229.2	100.8	38.1	375.3
1965	8 384	(a) 8.3	284.0	119.5	39.8	451.5
1970	8 405	10.8	378.8	200.6	56.2	646.4
1975	7 986	16.5	502.2	279.9	122.3	920.8
1980 (b)	5 056	11.7	370.9	181.2	86.6	649.3
1981	5 063	11.2	367.7	187.5	92.1	658.5

(a) The specification of 'Bull calves (under 1 year)' from 1963-64 may affect the comparability of the series.

(b) Not directly comparable with earlier years; see definition of 'Agricultural establishment', given earlier.

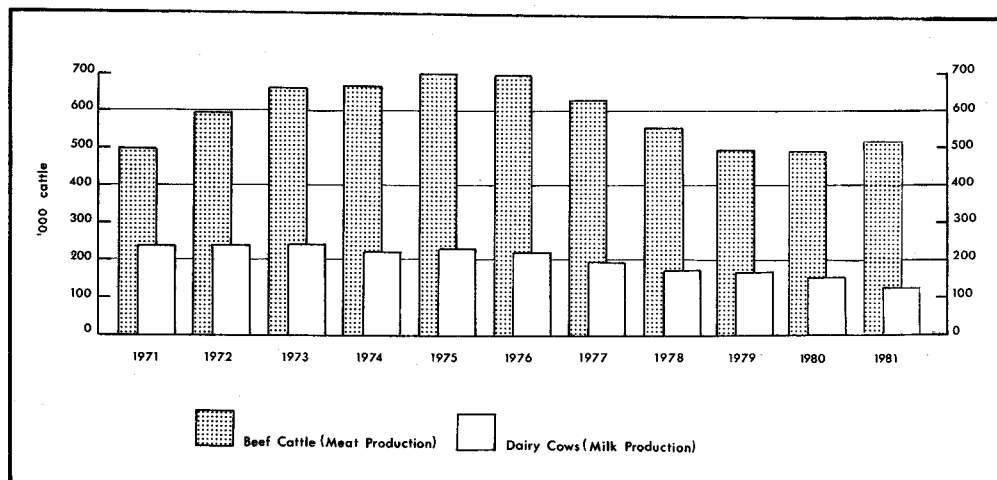
Breeds of Cattle

The main breeds of cattle in Tasmania for milk production are Jersey, Friesian and Ayrshire with small numbers of milking Shorthorn and Guernsey, while breeds used for the production of beef are Hereford, Aberdeen Angus, Shorthorn and Devon. In recent years, new cattle lines such as the Brahmans, Murray Greys and Charolais have been introduced by farmers wishing to utilise the advantages of cross-breeding.

The following graph gives an indication of the recent trends in numbers of cattle according to their association with the beef industry or the dairy industry. Details of the classification used are given in the notes to a table above.

Numbers of Beef and Dairy Cattle, Tasmania

(Cattle Mainly for Meat Production and Cattle Mainly for Milk Production)



Sheep

The table below shows sheep numbers on agricultural establishments for recent years:

Sheep on Agricultural Establishments, at 31 March, Tasmania
(^{'000})

Year	Sheep	Year	Sheep	Year	Sheep	Year	Sheep
1970	4 559.6	1973	3 824.4	1976	4 248.9	1979	4 156.6
1971	4 517.2	1974	3 963.8	1977	4 014.6	1980	4 245.4
1972	4 236.7	1975	4 136.2	1978	3 969.3	1981	4 380.9

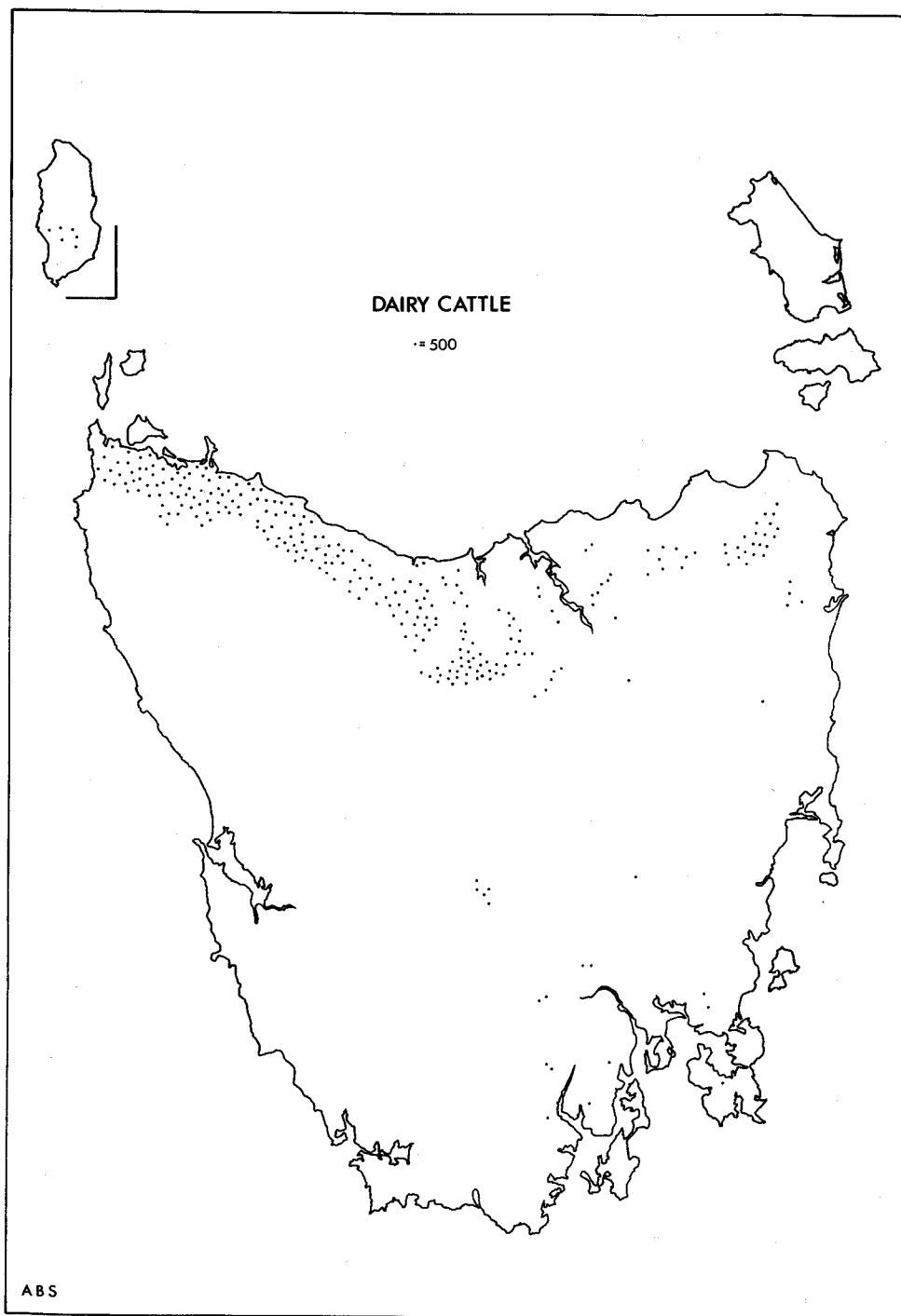
The next table shows the geographical distribution and various descriptions of sheep and also details of the lambing season:

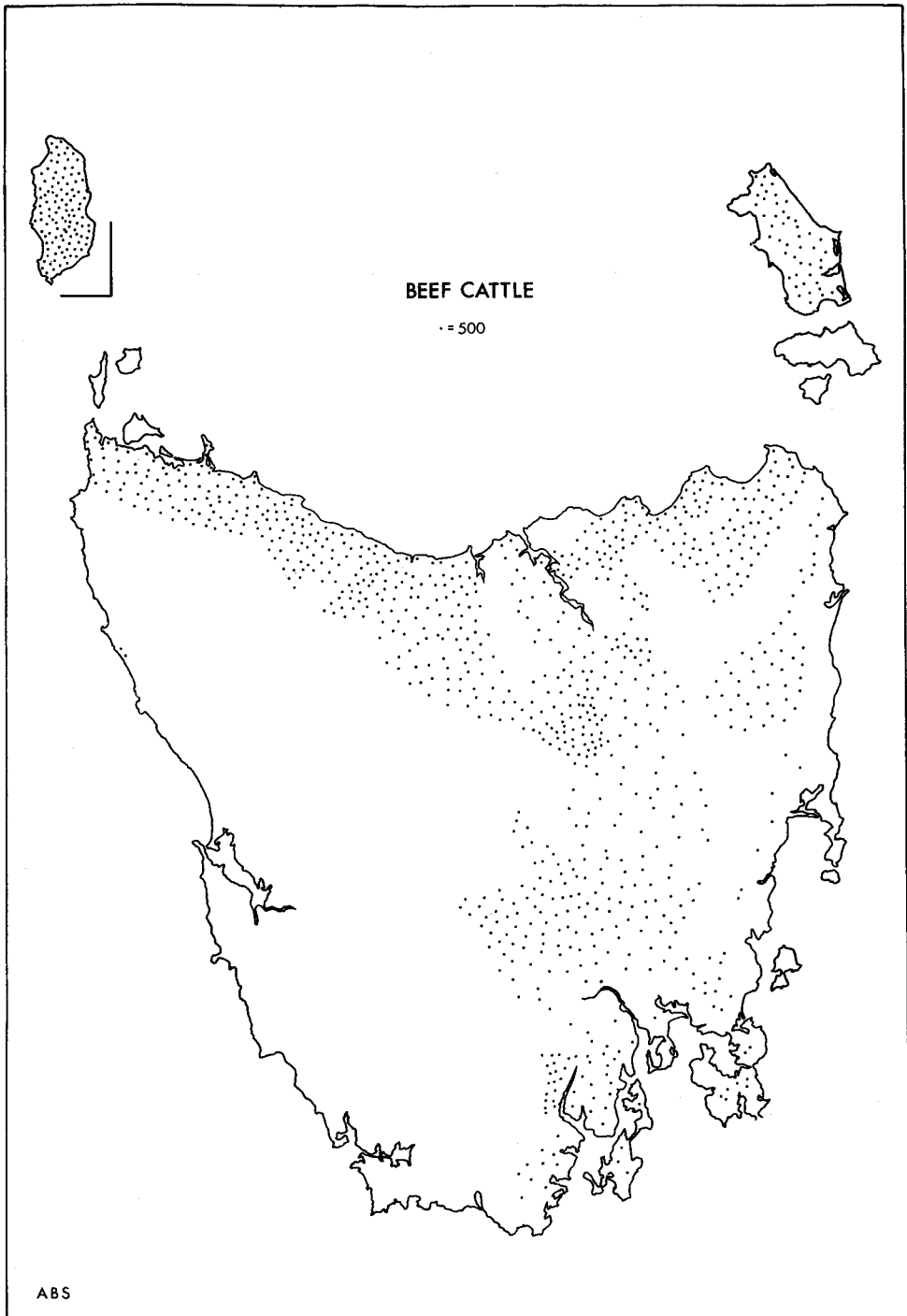
Description of Sheep at 31 March 1981 and Lambing 1980 Season, by Statistical Division

Particulars	Hobart and Southern	Northern			Mersey-Lyell			Total Tasmania
		Tamar (a)	North Eastern (a)	Total	North Western (a)	Western (a)	Total	
Establishments with sheep	1 033	1 021	432	1 453	863	2	865	3 351
Sheep (^{'000})—								
Rams (1 year and over)	18.9	15.6	13.0	28.6	4.9	—	4.9	52.4
Breeding ewes	809.4	590.4	505.7	1 096.1	186.8	—	186.8	2 092.4
Other ewes (1 year and over)	51.4	42.2	34.8	77.0	8.9	—	8.9	137.3
Wethers (1 year and over)	432.4	165.4	270.7	436.1	39.6	—	39.6	908.1
Lambs and hoggets (under 1 year) ..	437.9	335.8	305.9	641.7	111.2	—	111.2	1 190.8
Total	1 750.1	1 149.2	1 130.2	2 279.4	351.4	—	351.4	4 380.9
Lambing, 1980 season—								
Ewes mated (^{'000})	695.2	553.7	461.5	1 015.2	181.2	—	181.2	1 891.6
Lambs marked (^{'000})	607.1	501.2	391.8	893.0	173.5	—	173.5	1 673.6
Marking ratio (b) .. %	87.3	90.5	84.9	88.0	95.8	—	95.8	88.5

(a) Statistical sub-division.

(b) Lambs marked as percentage of ewes mated; lamb mortality is one of the factors affecting marking ratios.





The following table summarises the descriptions of sheep and gives details of lambing on a State basis:

Description of Sheep at 31 March and Details of Lambing Summary, Tasmania

<i>Particulars</i>	1970	1975	1977	1978	1979	1980	1981
Establishments with sheep no.	4 815	3 844	3 062 (a)	3 127	3 207	3 288	3 351
Sheep ('000)—							
Rams (1 year and over)	50	50	48	49	49	51	52
Breeding ewes	2 026	1 846	1 793	1 780	1 933	2 022	2 092
Other ewes (1 year and over)	195	209	185	174	143	127	137
Wethers (1 year and over)	1 064	998	1 007	923	922	889	908
Lambs and hoggets (under 1 year)	1 225	1 034	982	1 044	1 110	1 156	1 191
Total	4 560	4 136	4 015	3 969	4 157	4 245	4 381
Lambing (b)—							
Ewes mated	1 831	1 644	1 640	1 672	1 712	1 861	1 892
Lambs marked—							
Number	'000 1 715	1 466	1 378	1 529	1 582	1 706	1 674
Marking ratio (c)	% 93.6	89.2	84.0	91.4	92.4	91.7	88.5

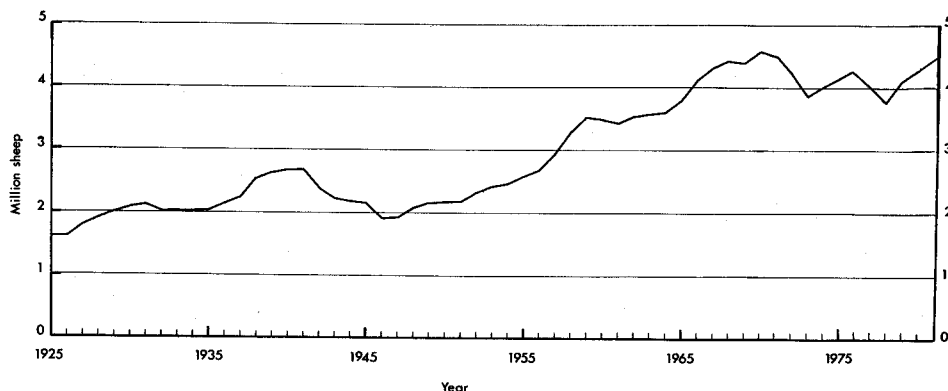
(a) Not directly comparable with earlier years; see definition of 'Agricultural establishment' given earlier.

(b) In the season preceding the year named.

(c) Lambs marked as percentage of ewes mated.

The following graph shows the trend in sheep numbers since 1925 and highlights the decline in the early 1970s:

Sheep Numbers, Tasmania



Breeds of sheep

The Merino is the mainstay of the Australian wool industry and accounts for over 75 per cent of the Australian sheep population. However, in Tasmania the predominant sheep breeds are Polwarth and Corriedale; both were originally developed from merino cross-breeds. A new sheep breed, the 'Cormo', has been developed in Tasmania to suit local conditions and to provide a highly fertile breed having a high yield of fine wool and good body conformation.

Over the past 10 years, the breeds of sheep reported by growers have shown a trend in favour of Polwarths. The following table shows the main breeds of sheep (including rams) as percentages of total sheep:

Proportion of Breeds of Sheep at 31 March, Tasmania (a)
(Per Cent)

Breed	1968	1969	1970	1971	1974	1977	1980
Polwarth	40.5	41.7	42.5	43.6	44.0	42.6	43.3
Corriedale	18.0	17.3	15.4	14.4	13.1	12.4	12.9
Merino	7.1	7.7	7.9	8.9	10.7	10.5	10.6
Cormo	—	—	0.5	1.0	1.9	3.0	2.9
Romney marsh	2.0	1.9	1.2	1.3	0.7	1.1	1.3
Other breeds	3.0	3.3	3.5	3.9	4.4	5.4	7.0
Comebacks	10.7	11.1	12.6	11.8	14.8	13.9	9.1
Cross-breds	18.7	17.0	16.4	15.0	10.4	11.1	12.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) These data are now only available on a triennial basis.

Sheep in Tasmania are mostly run on improved pastures. However, particularly in the Midlands, use is made of considerable areas of unimproved 'run' country. The Central Plateau also provides summer grazing, particularly for wethers.

Pigs

The geographical distribution of pigs, by statistical division, is shown in the next table:

Distribution of Pigs by Statistical Division at 31 March 1981

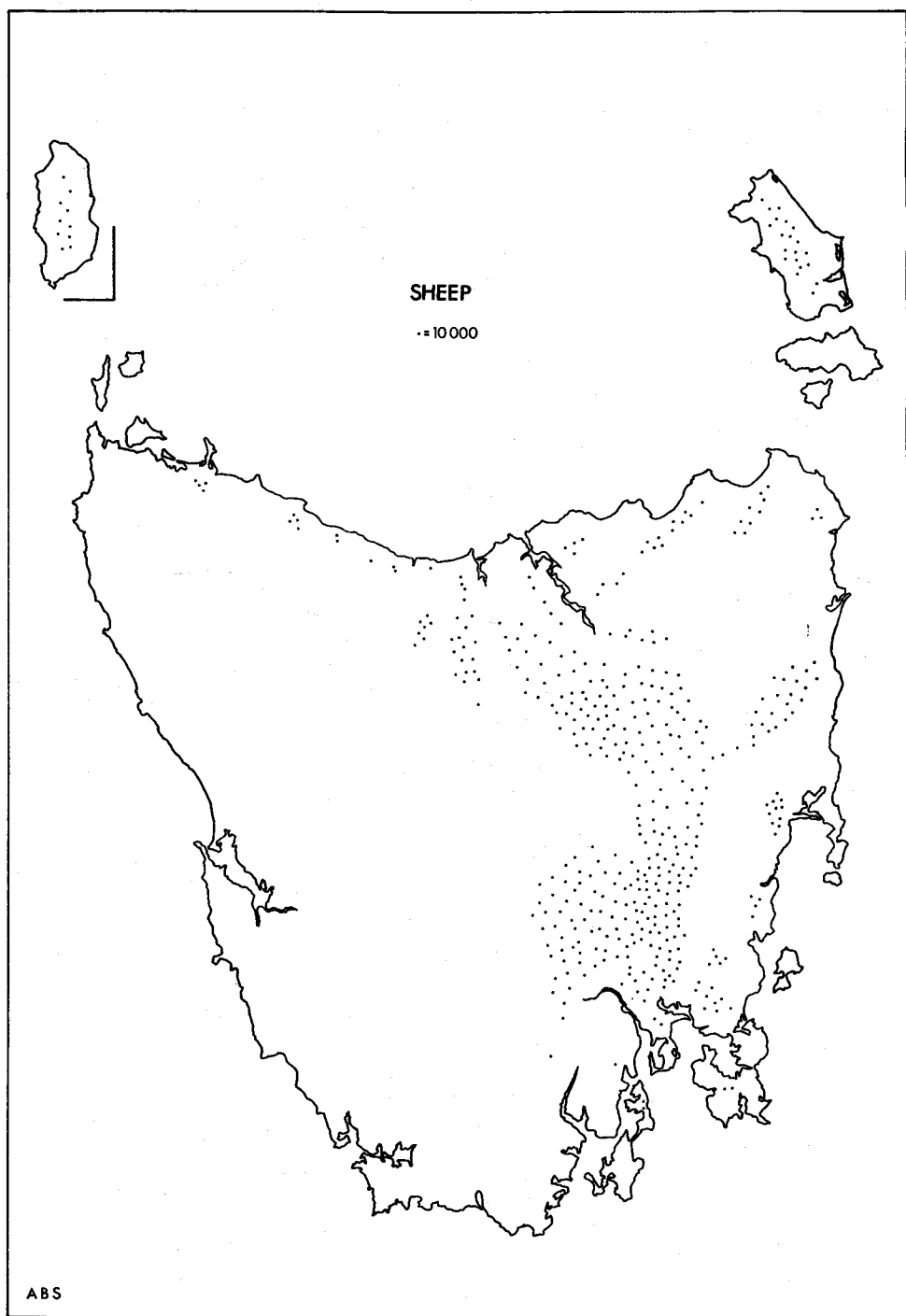
Particulars	Hobart and Southern	Northern			Mersey-Lyell			Total Tasmania
		Tamar (a)	North Eastern (a)	Total	North Western (a)	Western (a)	Total	
Establishments with pigs (no.)	139	158	60	218	210	2	212	569
Pig numbers—								
Boars	125	176	74	250	236	1	237	612
Breeding								
sows and gilts	1 282	1 972	1 091	3 063	3 291	5	3 296	7 641
Other (b)	6 031	13 058	6 404	19 462	20 708	21	20 729	46 222
Total pigs	7 438	15 206	7 569	22 775	24 235	27	24 262	54 475

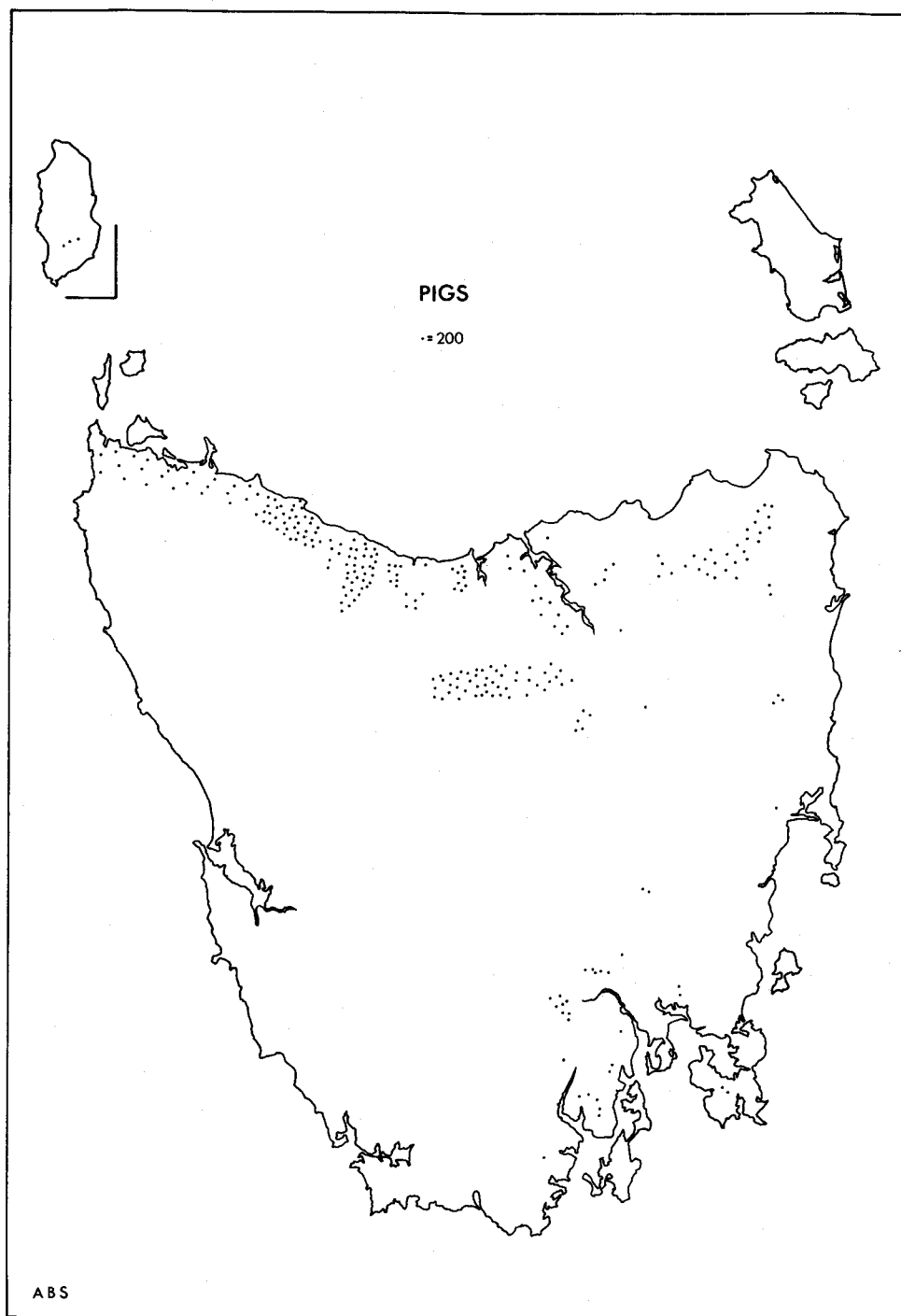
(a) Statistical sub-division.

(b) Includes baconers and porkers, backfatters, stores, weaners, suckers and slips.

The number of pigs at 31 March each year is not, in itself, a very meaningful figure. It is possible for a sow to produce two litters within the one year and for the offspring to number more than 10 in each litter. It follows, therefore, that the real measure of activity in pig-raising is not so much the size of the pig herd at a particular point in time, but rather the number of pigs slaughtered and the dressed carcass weight of the meat so produced; such information is given in the 'Livestock Products' section of this chapter.

In the previous table the most significant item is the number of breeding sows. A sow can be mated when only nine or ten months old and the gestation period is a mere four months. Piglets are weaned at four to six weeks—this early weaning calls for more skilled management but has advantages of avoiding heavy weight loss by the sow and reducing the period between litters.





The following table summarises pig numbers from 1960:

Pigs on Agricultural Establishments at 31 March, Tasmania: Summary

Year	Establishments with pigs	Boars	Breeding sows	Other (a)	Total pigs
1960	3 681	2 075	10 730	54 313	67 118
1965	3 315	2 327	14 578	75 116	92 021
1970	2 302	1 978	16 629	92 668	111 275
1975	1 010	976	9 243	53 754	63 973
1980	690 (b)	786	8 573	54 110	63 469
1981	569	612	7 641	46 222	54 475

(a) Includes baconers and porkers, backfatters, stores, weaners, suckers and slips.

(b) Not directly comparable with earlier years; see definition of 'Agricultural establishment', given earlier.

LIVESTOCK PRODUCTS

The statistics in the following section refer, in the main, to quantities of livestock products.

Wool

Wool Production

For statistical purposes, the total amount of wool produced in the State in any year consists of not only the 'clip' (shorn wool) but also of the wool on skins, irrespective of whether it is actually removed by local fellmongers or exported on skins. Production figures for recent years are given in the next table:

Wool Production (a) Summary
(⁰⁰⁰ kg)

Year	Shorn wool (including crutchings)	Fell- mongered wool, and wool exported on skins	Total	Year	Shorn wool (including crutchings)	Fell- mongered wool, and wool exported on skins	Total
1975-76	17 962	1 989	19 951	1978-79	17 442	1 636	19 079
1976-77	16 174	1 935	18 109	1979-80	18 193	1 810	20 003
1977-78	16 950	1 974	18 924	1980-81	18 091	1 958	20 049

(a) Fellmongered wool has been converted to greasy wool equivalent weight.

As illustrated in the previous table the shorn wool component has accounted for almost 90 per cent of total wool production over the last 6 years.

Total wool production of 21 861 000 kilograms in 1969-70 is the highest recorded wool output for Tasmania. During the early 1970's, uncertain economic conditions in the wool industry resulted in a substantial decline in production, but this has now recovered and wool production is steadily increasing.

Export of Wool

Export details for wool for recent years are given in the following table:

Exports of Wool, Greasy (Overseas and Interstate)
(⁰⁰⁰ kg)

Year	Quantity	Year	Quantity	Year	Quantity
1972-73	17 735	1975-76	17 436	1978-79	r 16 306
1973-74	16 963	1976-77	16 204	1979-80	r 13 213
1974-75	15 947	1977-78	16 369	1980-81	16 406

It should be noted that not all Tasmanian wool is exported, some being used, after scouring, etc., for manufacturing purposes within the State. Any locally processed wool exported is excluded from the above table.

Shorn Wool

The principal months for shearing in Tasmania are October, November and December, but during more recent years an increasing number of farmers have been shearing outside the traditional spring period. Such practices not only facilitate flock and property management but also provide more continuous employment for shearers and shed hands. The following table gives shearing details for recent years:

Shearing and Shorn Wool Obtained									
Year	Numbers shorn			Shorn wool obtained			Average yield		
	Sheep	Lambs	Total	From sheep (a)	From lambs	Total	From sheep (a)	From lambs	Total
	'000	'000	'000	'000 kg	'000 kg	'000 kg	kg	kg	kg
1975-76	3 579	772	4 351	16 930	1 032	17 962	4.73	1.34	4.13
1976-77	3 492	737	4 229	15 247	927	16 174	4.37	1.26	3.82
1977-78	3 483	759	4 242	15 947	1 003	16 950	4.58	1.32	4.00
1978-79	3 508	811	4 319	16 307	1 135	17 442	4.65	1.40	4.04
1979-80	3 668	882	4 550	16 978	1 215	18 193	4.63	1.38	4.00
1980-81	3 659	968	4 627	16 698	1 393	18 091	4.56	1.44	3.91

(a) Includes crutchings from sheep.

In 1980-81, 54 per cent of the shorn wool produced in Tasmania came from the Northern Statistical Division; the combined Hobart and Southern Statistical Divisions and the Mersey-Lyell Division, contributed 39 and 7 per cent of the total respectively.

The next table shows the geographical distribution of shorn wool production:

Shearing and Shorn Wool Obtained (a) by Statistical Division, 1980-81								
Particulars	Hobart and Southern	Northern			Mersey-Lyell			Total Tasmania
		Tamar (b)	North Eastern (b)	Total	North Western (b)	Western (b)	Total	
Number Shorn ('000)								
Sheep	1 527	903	974	1 877	254	—	254	3 659
Lambs	301	296	272	567	100	—	100	968
Shorn Wool Obtained (tonnes)								
From—Sheep	6 708	4 263	4 587	8 850	1 140	—	1 140	16 698
Lambs	393	437	404	841	159	—	159	1 393
Total	7 101	4 700	4 991	9 691	1 299	—	1 299	18 091
Average Yield (c) (kg)								
Sheep	4.39	4.72	4.71	4.71	4.49	—	4.49	4.56
Lambs	1.31	1.48	1.49	1.48	1.58	—	1.58	1.44

(a) Includes crutchings from sheep.

(b) Statistical sub-division.

(c) Per sheep or lamb shorn.

Wool Auctions

The bulk of Tasmanian shorn wool is sold to overseas buyers through auctions organised by wool-selling brokers in Hobart and Launceston. Four auction sales are held in each centre each year—in October, December, February and June, with the February sale being the most important.

In addition to wool sold at auctions, some wool is bought direct from growers by dealers and by local manufacturers of woollen goods. A small proportion of the State's wool is marketed at Victorian auctions; growers on King Island and Flinders Island tend to use this outlet because of sea transport factors.

The following table shows the average price of shorn greasy wool sold at Tasmanian auctions in selected years since World War II and also the value of all wool produced. After a period of very low prices there was an upsurge in demand in 1972-73, particularly from Japanese buyers, and prices rose strongly. High prices continued until early 1974 when, with wool users turning to alternatives, buyers were being left with large stockpiles and prices started dropping. At this time the Australian Wool Corporation was established with the administration of the flexible reserve price scheme as part of its duties. A floor price of 300 cents per kilogram for 21 micron wool on a clean basis was originally set with the Wool Corporation carrying out 'support buying'. The market declined further, however, and the minimum price dropped to 250 cents for the 1974-75 and 1975-76 seasons. Prior to the devaluation of the Australian dollar in November 1976, the floor price was set at 275 cents for the 1976-77 season. After the devaluation the price was raised to 284 cents and remained at this level for 1977-78. Since then the following floor prices have been established: 1978-79, 298 cents, 1979-80, 318 cents, and 1980-81, 365 cents per kilogram.

Tasmanian Average Auction Price and Total Value of Wool Produced

Year	Average auction price per kg of shorn greasy wool	Total value of wool produced (a)	Year	Average auction price per kg of shorn greasy wool	Total value of wool produced (a)
	cents	\$'000		cents	\$'000
1949-50	131	9 530	1976-77	210	34 993
1959-60	114	16 508	1977-78	209	36 908
1964-65	109	19 050	1978-79	234	42 043
1969-70	88	18 081	1979-80	270	50 948
1974-75	137	23 890	1980-81	277	50 767

(a) Includes value of shorn wool, fellmongered and dead wool and estimated value of wool exported on skins.

The preceding price series refers only to shorn greasy wool sold at auction. In arriving at the value series for all wool produced, account is taken not only of wool sold at auction but also of direct growers' sales to dealers, manufacturers and fellmongers plus the estimated value of wool exported on skins.

Classification of Greasy Wool Sold at Auction

The following information is compiled by the Wool Statistical Service of the Australian Wool Corporation on the basis of catalogues of auction sales. Wool sold at auction is classified according to quality which is expressed in terms of average fibre diameter. This is measured in millionths of a metre (microns).

Mean Micron Analysis (a) of Greasy Wool Sold at Auction
(Source: Australian Wool Corporation)

Average fibre diameter (mean microns)	Greasy wool sold at auction—percentage of total			
	In Tasmania		In Australia	
	1979-80	1980-81	1979-80	1980-81
Finer than 18	0.5	0.6	0.4	0.3
18	2.1	2.1	1.2	1.9
19	2.4	2.6	4.3	4.5
20	2.3	2.5	10.8	11.2
21	16.6	18.3	15.8	16.5
22	17.0	17.1	19.9	20.0
23	11.8	11.7	13.1	11.5
24	10.6	10.4	9.9	9.6
25	10.3	8.4	5.7	5.4
26	4.5	4.3	3.9	4.0
27	5.1	4.5	3.5	3.6
28	3.7	3.5	2.6	2.8
29	1.0	1.1	0.5	0.6
30	4.4	4.5	3.4	3.3
31	0.6	0.7	0.2	0.2
32	2.7	2.2	1.6	1.3
33	0.2	0.2	0.1	0.1
34	0.6	0.7	0.3	0.3
36	0.2	0.2	0.1	0.2
38	0.1	0.2	0.1	0.1
Coarser than 38	—	—	—	—
Oddments	3.3	4.3	2.5	2.7
Total	100.0	100.0	100.0	100.0

(a) A micron equals one millionth of a metre; the measurement relates to fibre diameter.

While the proportion of fine wool is comparatively low in the Tasmanian clip (since the State is historically and climatically a producer of cross-bred wool), growers offering fine wool sell a high proportion of superfine merino wool at premium prices.

Clean Wool Yield

In 1980-81 the Tasmanian proportion of auctioned greasy wool classified as 'finer than 25 mean microns' was 65 per cent, whereas the corresponding Australian proportion was 76 per cent. There is usually a difference of this order, but the Tasmanian average price is nevertheless usually a few cents above the Australian auction average. Tasmanian averages, with Australian equivalents in brackets, have been (in cents): 1974-75, 137.46 (126.99); 1975-76, 156.57 (143.25); 1976-77, 210.00 (182.73); 1977-78, 208.62 (187.14); 1978-79, 234.36 (205.24); 1979-80, 270.37 (243.57); 1980-81, 277.21 (255.97). This apparent contradiction is explained by taking into account a second factor, not included in the foregoing quality analysis, namely the yield of clean wool that can be obtained from greasy wool. In respect of this factor, Tasmanian wools tend to yield higher than Australian; both natural and artificial environmental factors operate to the advantage of the Tasmanian clip. Evidence of this peculiarity of Tasmanian wool is provided in the next table which suggests that Tasmanian wool is freer from dust and vegetable matter than wool produced in other states.

Average Clean Yield of Wool Clip, Tasmania and Other Australian States
(Source: Australian Wool Corporation)

State of sale (a)	Yield of clean wool from greasy (per cent)						
	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
New South Wales	60.54	61.06	60.78	61.28	61.46	60.62	59.41
Victoria	61.55	62.02	61.14	62.01	65.67	62.76	63.36
Queensland	59.04	58.91	58.68	59.46	59.66	58.91	58.61
South Australia	58.76	57.90	56.70	56.88	57.87	58.87	59.28
Western Australia	57.69	58.42	57.50	56.91	57.68	58.35	58.14
Tasmania	66.21	67.01	66.86	67.42	68.17	67.77	66.45
Australia	59.93	60.18	59.21	59.93	63.39	63.45	60.56

(a) Wool from other Australian states is not sold at Tasmanian auctions so, for Tasmania, 'State of sale' and 'State of origin' are virtually the same except that some wool from Tasmania (mainly King and Flinders Islands) is sold at Victorian auctions.

Meat

Slaughtering

To fully record the level of meat production for human consumption, statistics are obtained in respect of operations in abattoirs, other slaughtering establishments and factories, and slaughtering on farms.

The following table summarises slaughtering activity for recent years:

Stock Slaughtered (a) for Human Consumption, Tasmania
(⁰⁰⁰)

Year	Cattle and calves				Sheep and lambs			Pigs
	Bulls, bullocks & steers	Cows and heifers	Calves	Total	Sheep	Lambs	Total	
1975-76	164	119	65	348	455	614	1 069	94
1976-77	145	140	73	358	469	524	993	100
1977-78	161	133	69	362	387	650	1 037	92
1978-79	124	103	54	281	345	503	848	91
1979-80	96	83	39	218	317	613	930	89
1980-81	96	86	42	224	403	647	1 050	89

(a) In all registered slaughtering establishments and on farms.

Meat Production

Statistics in terms of carcass weight covering the same field as the previous tables on slaughtering are shown in the following table. This provides a more precise measure of actual meat production and annual trends.

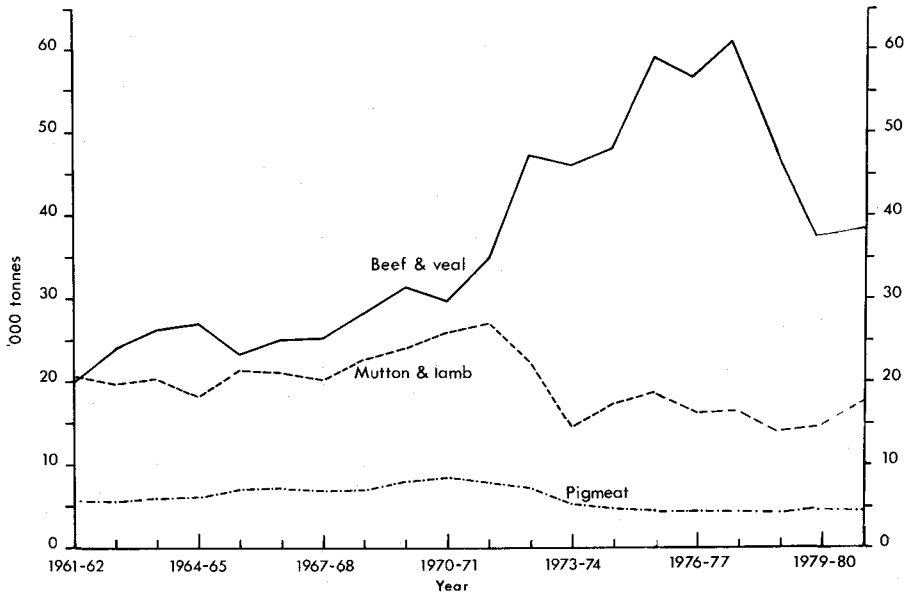
Production of Meat, Tasmania
(⁰⁰⁰ tonnes—Carcass Weight)

Year	Beef and veal			Mutton and lamb			Pigmeat (a)	Total meat
	Beef	Veal	Total	Mutton	Lamb	Total		
1975-76	57.9	1.2	59.2	9.0	9.8	18.8	4.5	82.5
1976-77	55.8	1.6	57.4	8.5	8.2	16.7	4.9	79.0
1977-78	59.8	1.6	61.3	7.0	9.8	16.9	4.8	83.0
1978-79	46.3	1.2	47.4	6.8	7.9	14.7	4.8	67.0
1979-80	36.6	0.8	37.4	5.6	9.0	14.7	4.9	56.9
1980-81	36.8	0.9	37.7	7.4	10.0	17.4	4.8	59.9

(a) Includes pork for manufacture into bacon and ham.

In the table on meat production overleaf, the product from pig slaughtering has been referred to as 'pigmeat'. A large proportion of 'pigmeat' is converted into bacon and ham in Tasmania. 'Pigmeat' is also exported and used, in part, for producing bacon and ham in other states. The next table summarises the production of bacon and ham in Tasmania since 1975-76.

Meat Production (Carcass Weight), Tasmania



**Production of Bacon and Ham, Tasmania
(Tonnes—'bone-in')**

Year	Bacon and ham	Year	Bacon and ham
1975-76	2 356	1978-79	2 457
1976-77	2 434	1979-80	2 094
1977-78	2 505	1980-81	2 375

Export of Meat

The next table shows exports of edible meat from cattle, sheep and pigs by weight. Export weight cannot be directly compared with production weight since the former includes boneless meat and meat which has had its fat content reduced, while the latter is in terms of carcass weight.

**Exports of Meat, Tasmania, 1979-80
(Tonnes)**

Destination	Beef and veal	Lamb	Mutton	Pork	Offal (edible)	Bacon and ham
Interstate	956	459	172	119	—	16
Overseas	12 411	1 386	3 245	—	852	8
Total	13 367	1 845	3 417	119	852	24

The importance of Tasmania's overseas meat trade can be judged from Australian Meat Board estimates of the percentage of Tasmanian production actually exported. The trends in recent years are shown by the following table:

Proportion of Tasmanian Meat Production Exported Overseas (a)
(Source: Australian Meat and Livestock Corporation)
(Per Cent)

Type of Meat	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Beef and veal	37.7	43.2	48.3	49.4	57.0	r 57.7	48.9
Mutton	55.0	67.8	74.1	71.4	69.1	56.1	79.7

(a) The estimated percentages are derived by converting actual export weights to a carcass weight equivalent, thus giving a basis for comparison with production figures.

Dairy Products

The following table summarises milk production and utilisation over recent years.

Milk Production and Milk Utilisation (a) Tasmania: Summary

Years	Whole milk intake by factories (a)	Dairy cows at 31 March	Average annual production of milk per dairy cow (b)	Market milk sold (c)	Production		Milk used in other milk production (d)
					Butter	Cheese	
	million litres	'000	litres	million litres	tonnes	tonnes	million litres
1978-79	365	110.5	3 196	59	7 075	17 494	30
1979-80	316	103.2	2 955	57	5 461	15 431	31
1980-81	288	98.8	2 852	56	4 234	13 905	38

(a) Source: Australian Dairy Corporation. Includes factories pasteurising market milk.

(b) The divisor for calculating the average yield is the estimated number of dairy cows which were in milk at any part of the year. Averages are, therefore, lower than for cows which were yielding during the greater part of the year. The figures given should be treated as an index rather than an actual average quantity of milk produced per dairy cow.

(c) Source: Australian Dairy Corporation.

(d) Derived by deducting the estimated whole milk equivalent of butter and cheese production, and market milk from total milk intake by factories.

Butter

Details of production and exports of butter for recent years are given in the following table:

Butter (a): Production and Exports, Tasmania
(Tonnes)

Year	Production (factory)	Net exports (b)	Year	Production (factory)	Net exports (b)
1975-76	10 762	9 955	1978-79	7 075	2 530
1976-77	9 707	4 387	1979-80	5 461	r 2 871
1977-78	7 910	6 248	1980-81	4 234	1 510

(a) Includes butter equivalent of butter oil.

(b) Net and gross are identical as there were no imports during the years shown. Includes overseas and interstate exports.

Bee-farming

The next table, which summarises beekeeping statistics for recent years, is restricted to details from apiarists with 40 or more hives:

Bee-farming, Tasmania

Year	Apiarists	Hives	Honey produced		Beeswax produced	
			Quantity	Average per productive hive	Quantity	Average per productive hive
	no.	no.	tonnes	kg	tonnes	kg
1975-76	63	10 932	626	70.1	11.7	1.31
1976-77	72	12 635	553	58.1	8.2	0.86
1977-78	71	12 302	759	73.3	12.4	1.20
1978-79	63	12 081	684	67.3	12.3	1.21
1979-80	54	12 194	568	56.7	8.5	0.85
1980-81	59	12 282	669	64.6	9.1	0.88

Of the 59 apiarists with 40 or more hives in 1980-81, 25 with 100 or more hives contributed 91 per cent of the total honey produced.

Many of the larger commercial apiarists can be described as 'migratory' in the sense that they seasonally move their hives for access to leatherwood, growing in the Western Sub-division and near the new Lake Gordon. Leatherwood, *Eucriphia lucida*, from which a distinctively flavoured honey is produced, is unique to Tasmania. The quantity of leatherwood honey produced varies considerably from year to year depending upon the amount of blossom and weather conditions. Leatherwood honey production in 1980-81 (372 tonnes) was 39 per cent below the record level of 1977-78. It accounted for 56 per cent of total honey production in 1980-81 compared with 66 per cent the previous year and 80 per cent in 1977-78.

Tasmania is both an exporter and importer of honey. The Tasmanian market shows a preference for the clover type of honey rather than the stronger flavoured leatherwood. Considerable quantities of honey are imported from other states, both for manufacturing and for retail outlets, while much of Tasmania's production, particularly leatherwood but also clover, is exported.

The following table gives details of Tasmanian production and exports of honey. Data on imports of honey are not available for publication.

Production and Exports of Honey, Tasmania
(⁰⁰⁰ kg)

Year	Production (a)	Exports	Year	Production (a)	Exports
1975-76	626	370	1978-79	684	321
1976-77	553	367	1979-80	568	274
1977-78	759	269	1980-81	669	343

(a) By apiarists with 40 or more hives.

Poultry Farming

Household Production: Many householders have small flocks of up to 20 birds (i.e. below the legal minimum requiring registration and payment of fees) and surveys suggest that these 'back-yard' flocks may produce up to 50 per cent of all eggs. However, no accurate statistics are available for this component and it is excluded from the tables that follow.

Commercial Producers: Producers with small flocks over the legal minimum size (more than 20 birds) may nevertheless keep them mainly for their own use rather than for the sale of eggs. Accordingly, producers with less than 100 birds (of all types) have been excluded from these statistics; the Bureau's 1966-67 census of the poultry industry established that producers with between 20 and 100 birds numbered 213 but owned only three per cent of the total number of hens and laying pullets in commercial flocks in Tasmania.

In 1969 there were 148 poultry farms with a total of 181 000 hens and laying pullets; by 1980 the number of farms had decreased to 47 with 200 100 hens and laying pullets and 519 600 other poultry. A size classification of the 47 farms in 1980 shows that 22 farms (only 47 per cent of farm numbers) possessed 75 per cent of laying stock.

Poultry Numbers and Egg Production, 1979-80, Tasmania (a)
Commercial Producers Only (b)

Statistical division	Number of establishments with poultry	Poultry numbers at 30 June 1980			Eggs produced during year (c)
		Hens and laying pullets (d)	Other fowls	Ducks and drakes, turkeys and geese	
	no.	'000	'000	'000	'000 doz.
Hobart	8	62.8	29.7	—	1 062.2
Southern	22	47.5	456.4	n.p.	773.4
Northern	10	69.9	17.8	n.p.	1 224.0
Mersey-Lyell	7	19.9	14.4	n.p.	353.0
Total Tasmania	47	200.1	518.2	1.4	3 412.6

(a) Data were not collected for 1980-81.

(b) Relates to establishments that possessed 100 or more birds of all types at 30 June 1980.

(c) Hen and pullet eggs only.

(d) Not comparable with Egg Marketing Board series due to different definitions.

Poultry Slaughtering

The trend in poultry slaughtering in recent years has been towards larger scale establishments with the growing of birds for slaughter being carried out by farmers under contract to slaughterers. The following table shows the number of poultry slaughtered during the last three years and the weight of chicken and other poultry meat produced.

Number and Weight of Poultry Slaughtered (a), Tasmania

Year	Number	Live weight		Dressed weight (b)	
		Total	Average per bird	Total	Average per bird
	('000)	(tonnes)	(kg)	(tonnes)	(kg)
<i>Chickens (c)</i>					
1978-79	3 178	5 392	1.7	3 924	1.2
1979-80	3 642	6 306	1.7	4 442	1.2
1980-81	3 702	6 495	1.8	4 543	1.2
<i>Other Fowls (d)</i>					
1978-79	80	176	2.2	114	1.4
1979-80	101	238	2.4	144	1.4
1980-81	107	254	2.4	127	1.2
<i>Ducks and Drakes, Turkeys and Geese</i>					
1978-79	16	45	2.8	31	1.9
1979-80	11	28	2.6	19	1.8
1980-81	1	6	3.7	4	2.8

(a) Includes only establishments slaughtering 100 or more birds of all kinds.

(b) Includes weight of whole birds, pieces and giblets.

(c) Includes broilers, fryers and roasters.

(d) Hens, roosters, etc.

TECHNICAL ASPECTS OF AGRICULTURAL INDUSTRY

Area of Land Irrigated

Introduction

In 1980-81 there were only 32 748 hectares of land irrigated in Tasmania. Owing to the generally reliable rainfall in the State, scarcity of water is not such a problem as it is in the other Australian states, although quite a number of streams are not permanently flowing and drought conditions in some areas of Tasmania do occur.

Area Irrigated

A total of 1 582 farms reported the use of irrigation in 1980-81, an increase on the number during 1978-79 (1 270). Details of the area of crops and pastures irrigated in Tasmania in recent years are shown in the following table:

Area of Crops and Pasture Irrigated, Tasmania (a)
(Hectares)

Year	Crops (b)				Pasture	Total
	Fruit	Potatoes	Other vegetables	Other crops		
1974-75	2 605	3 105	4 271	1 582	12 123	23 686
1975-76	2 158	2 720	4 627	1 729	11 071	22 305
1976-77	1 944	2 938	4 955	1 963	10 463	22 263
1977-78	2 002	2 985	5 918	4 940	14 148	29 993
1978-79	2 116	2 976	4 800	2 101	11 327	23 320
1980-81	2 493	4 109	7 195	3 975	14 976	32 748

(a) Details of irrigation were not collected in 1979-80.

(b) Excludes pasture crops which are included with 'Pasture'.

Irrigation Methods and Sources of Water

The main method of irrigation is by 'spray' which accounted for 71.5 per cent of the total area irrigated in 1980-81. The following table gives details of the areas of crops, etc. irrigated and the methods of irrigation used:

Methods of Irrigation, Tasmania, 1980-81
(Hectares)

Crop or pasture irrigated	Method			Multiple and other methods	Total
	Spray	Furrow and/or flood	Trickle		
Crop—					
Fruit	1 620	102	553	200	2 475
Grape vines	10	—	8	—	18
Potatoes	3 744	23	—	342	4 109
Other vegetables	6 610	34	—	551	7 195
Other crops (a)	3 567	278	3	127	3 975
Pasture (incl. lucerne)	7 853	6 770	—	353	14 976
Total	23 404	7 207	564	1 573	32 748

(a) Excludes pastures harvested.

Irrigation Schemes

Cressy-Longford Irrigation Scheme

The scheme is administered and operated by the Rivers and Water Supply Commission. It is the State's first major irrigation system, being officially opened in 1974. Situated some 30 km south of Launceston between Cressy and Longford, the Irrigation District covers about 10 000 ha of some of the oldest and most intensively farmed areas in the State.

The source of supply is the tail-race of the Poatina Power Station. Water is supplied under gravity to each farm in the constituted Irrigation District through an earthen channel system, some 94 km in length.

In 1977, following requests from landholders in the area, the scheme was extended to supply an additional nine properties around Toiberry by pumping from the North Channel. Water is delivered into individual farmer's holding dams from which they draw their requirements either by pumping or gravity at rates suitable to their particular needs.

Rates and charges are the same as for other users in the District, the cost of pumping being absorbed in the operational expenses for the whole scheme.

Water from the scheme can also be discharged into the Liffey River below Bracknell and at least another twenty riparian holdings within this District can be supplied.

Each piece of land within the Irrigation District and those properties which can be supplied within the Liffey River Augmented Flow District are given an 'Irrigation Right' which is an annual entitlement to a certain quantity of water. The total water allocation as Irrigation Rights within the Cressy-Longford Irrigation District in 1981-82 was approximately 7 075 hectares. The average size of holdings in the Cressy-Longford Irrigation District is 137 hectares and the average water allocation is 98 megalitres.

Water charges within the Irrigation District for the 1981-82 season were \$5.00 per megalitre for amount of the Irrigation Right plus \$6.50 per megalitre for water used up to the amount of the Irrigation Right and thereafter a charge of \$5.00 per megalitre. The Hydro-Electric Commission charges the scheme \$1.30 per megalitre of water used by the irrigators.

The total water used from the scheme including irrigators on the Liffey River amounted to 7 635 megalitres which is some 200 megalitres more than the previous highest recorded usage in 1979-80. The total area irrigated was 2 980 hectares, the main crops being pasture 1 998 ha, green peas 541 ha, barley 184 ha, oats 126 ha, lucerne 36 ha and other crops 83 ha. Under full development 3 000-4 000 hectares could be irrigated annually.

Togari Water Supply

This scheme was originally administered by the Tasmanian Closer Settlement Board but authority to administer it was vested in the Rivers and Water Supply Commission in May, 1974. It is designed purely as a stock and dairy watering system for 44 dairy properties at Togari in the Circular Head Municipality. The total quantity of water used in 1981-82 was 122 000 kilolitres and the charges levied were:

- (i) 13.5 cents per kilolitre with a minimum payment of \$160 per block;
- (ii) 18.7 cents per kilolitre for consumption in excess of 2 000 kilolitres.

Tasmanian Herd Improvement Organisation

In accordance with the *Herd Improvement Act*, 1977, the Artificial Breeding Board was replaced by the Tasmanian Herd Improvement Organisation in July 1977. This new organisation took over the provision and promotion of herd improvement services, including both artificial breeding and herd recording.

In Tasmania most artificial breeding activities are undertaken by the Tasmanian Herd Improvement Organisation which operates a Semen Production Centre at Hadsphen Park and seven artificial insemination centres throughout the State. Some artificial in-

semination services are provided by private organisations. Approximately 80 per cent of inseminations in Tasmania are carried out with semen produced at Hadsen Park.

Because artificial breeding allows extensive use of superior bulls it has been used as an effective tool for herd improvement. From 1964 until 1977 the Tasmanian Herd Improvement Organisation carried out dairy bull breeding programs in which genetically superior bulls were selected on the performance of their female progeny in test mated herds. These bulls have been used extensively as proven sires for large numbers of the State's dairy cows. It has been estimated that these programs have achieved a 1 per cent annual genetic gain in the State dairy herd.

Since July 1977, a young bull breeding program has been operating in Tasmania under the commercial name 'Gold Star Breeding Program'. This program involves the extensive use of semen from young bulls between 12-24 months of age and the subsequent selection of the top bulls utilized in these programs as 'Super Sires' for the breeding of future young bull teams. It is calculated that the new program has the potential to achieve annual genetic gain in the order of from two to three per cent.

Owing to different management practices, artificial breeding has not been used so extensively in beef herds.

The following table gives details of the number of inseminations carried out by the Tasmanian Herd Improvement Organisation and the total number of cows mated by artificial breeding in Tasmania for recent years:

Artificial Breeding: Inseminations, Tasmania

Year	Cows submitted for artificial insemination	
	Carried out by T.H.I.O.	Total cows served (a)
	no.	no.
1979-80	31 725	40 264
1980-81	32 673	40 435
1980-81	30 746	40 000

(a) Includes cows inseminated by all licensed operators (commercial organisations and owner-operators).

Artificial Fertilisers

Types of Artificial Fertiliser

The basic types of artificial fertiliser employed are phosphatic (e.g. superphosphate), nitrogenous (e.g. sulphate of ammonia) and potassic (e.g. muriate of potash); their essential chemical contribution to plant nutrition being phosphoric oxide (P_2O_5), nitrogen (N) and potassium oxide (K_2O). Superphosphate, either 'straight' or with additives, is most widely used in Tasmania, the additives consisting of trace elements such as cobalt, molybdenum, copper, boron, zinc, etc. In addition to the basic fertiliser types, many combinations are also used.

Usage

The quantity of artificial fertilisers used in recent years on Tasmanian farms has changed markedly. The removal of the government bounty on superphosphate in December 1974, a substantial increase in its price and the need to reduce costs because of low prices for many farm products all contributed to a sharp drop in usage. The re-introduction of the bounty in July 1977 has assisted recovery and resulted in increased usage but the quantity applied is still substantially below the pre 1974-75 level.

Changes in government policy on bounties for the use of superphosphate have caused considerable interest in the extent of the concentration of usage. The following table shows the distribution of usage of artificial fertilisers (excluding straight nitrogenous types) according to the quantity used on establishments.

The table shows that establishments using over 50 tonnes accounted for 57.1 per cent of the quantity used in 1980-81 but represented only 13.2 per cent of the total number of establishments that used artificial fertiliser (other than straight nitrogenous types).

Rural Establishments Classified According to the Quantity of Artificial Fertiliser (Other than Straight Nitrogenous Types) Used, Tasmania, 1980-81

Particulars	Size category (tonnes used)			Total
	Up to 10	Over 10 and up to 50	Over 50	
Number of establishments	2 057	2 063	626	4 746
Percentage (a)	43.3	43.5	13.2	100.0
Quantity used (tonnes) (b)	10 664	51 140	82 272	144 076
Percentage (c)	7.4	35.5	57.1	100.0

(a) Of total establishments using fertilisers.

(b) Comprises 104 457 tonnes of superphosphate (including superphosphate with trace elements) and 39 619 tonnes of other types and mixtures.

(c) Of total fertiliser used.

The following table shows the amount of all types of artificial fertiliser used for recent years:

Artificial Fertilisers Used, Tasmania

Particulars	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Crops—						
Area fertilised	ha	45 141	49 592	54 114	61 074	n.a.
Fertiliser used—Total	t	21 123	24 053	26 686	29 093	29 607
Per hectare	t	0.47	0.48	0.49	0.48	n.a.
Pastures (a)—						
Area fertilised	ha	244 284	343 171	429 183	528 720	622 949
Fertiliser used—Total	t	44 386	60 571	75 249	94 672	113 629
Per hectare	t	0.18	0.18	0.18	0.18	0.20
Total usage—						
Area fertilised	ha	289 425	392 763	483 297	589 794	n.a.
Fertiliser used	t	65 509	84 624	101 935	123 765	143 236

(a) 'Pastures' includes lucerne.

ECONOMIC STATISTICS: AGRICULTURE

Economic statistics have been produced on agriculture in recent years giving a series which, from 1974-75, is comparable with the economic statistics produced for the manufacturing, mining, retail and other sectors of the economy (see Chapter 19 'Economic Censuses and Surveys').

The population identified as the basic framework for the Agricultural Finance Survey consists of all agricultural *enterprises*, i.e. all enterprises classified to an industry within sub-division 01, Agriculture, of the Australian Standard Industrial Classification (ASIC). Data connected with any non-agricultural activity of an agricultural enterprise (such as agricultural services, retailing, transport, etc.) are collected in addition to data about its agricultural activities. Any enterprise which is predominantly engaged in non-agricultural activity is out of scope of the survey.

Until 1977-78 the Agricultural Finance survey was conducted on an annual basis but from 1977-78 it has been conducted triennially.

The main items of interest from the survey for the years 1974-75 to 1977-78 are contained in the following table. Further details and an explanation of the terms used (in



*Dairy cattle graze on the lush pastureland of the North-West Coast
Edward Gall*

The rich chocolate soils of the North-West Coast provide some of the most productive farmland in Tasmania
Edward Gall



The last light of evening touches the fluted cliffs of Mt Olympus near Lake St Claire
Edward Gall





The new Lake Pedder

Mt Ossa (1617m), Tasmania's highest mountain, taken from an unnamed lake atop the Guardians *Edward Gall*



addition to those in Chapter 19) can be found in the Canberra Office of the Bureau publication *Agricultural Sector—Part IV Financial Statistics* (Cat. No. 7507.0).

Financial Statistics, Agricultural Enterprises (a)
(\$ million)

<i>Particulars</i>	<i>1974-75</i>	<i>1975-76</i>	<i>1976-77</i>	<i>1977-78</i>
Sales from crops	33.0	30.2	35.1	39.2
Sales from livestock	44.4	36.3	43.8	57.6
Sales from livestock products	50.5	57.3	57.7	65.1
Turnover	136.2	130.0	144.1	169.9
Purchases and selected expenses	71.3	65.2	67.8	82.4
Value added	67.9	66.6	77.9	87.2
Adjusted value added	59.1	60.2	69.2	77.4
Gross operating surplus	40.2	38.6	52.0	59.2
Cash operating surplus	30.3	26.3	41.7	49.7
Total net capital expenditure	16.8	15.5	18.2	19.4
Gross indebtedness	105.8	115.9	100.8	101.8

(a) These figures are estimates based on a sample and are therefore subject to sampling errors. 'Standard errors' indicating the reliability of each item are included in the Canberra Office of the Bureau publication *'Agricultural Sector, Part IV, Financial Statistics'* (Cat. No. 7507.0).

(b) See the section 'Economic Censuses and Surveys' in Chapter 19 for definitions.

VALUE OF AGRICULTURAL COMMODITIES PRODUCED

Definitions

The following definitions are employed:

- (i) *Gross Value* is the value placed on recorded production at the wholesale prices realised in the market place. In cases where primary products are consumed at the place of production, or where they become raw material for a secondary industry, these points of consumption are presumed to be market places. Subsidies and bounties paid by the State, Federal and Local Governments to primary industries are, in general, included in gross value of production.
- (ii) *Marketing Costs* are the costs of moving agricultural products from the place of production to the market place. These include freight, cost of containers, commission, insurance, storage, handling and other charges necessarily incurred by the producer in delivering commodities to market.
- (iii) *Local Value* is the value placed on recorded production at the place of production and is ascertained by deducting marketing costs from the gross value of commodities produced.

Sources of Information

The data used concerning quantity of agricultural production are supplied principally by farmers. Price and cost data are obtained from statutory authorities (e.g. Australian Wheat Board), market reports, wholesalers, brokers, auctioneers, etc., and from overseas and interstate trade statistics.

Period Covered

Crops: Production from crops grown during the year ended 31 March.

Other Agriculture: Year ended 30 June.

Value of Agricultural Products

Agriculture, for value of production purposes, is divided into: (i) crops; (ii) livestock slaughterings and other disposals; and (iii) livestock products.

Crops

The following table shows gross values for the crops sector for recent years:

Crops: Gross Value, Tasmania (a) (\$'000)						
<i>Crop</i>	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Cereals for grain	2 261	3 999	3 000	5 007	r 3 643	5 063
Legumes mainly for grain	185	205	185	430	278	232
Crops for hay (a)	146	478	161	290	235	358
Orchard tree fruit	13 138	12 137	13 465	17 513	17 438	17 782
Berry and small fruit	794	944	1 226	1 351	r 1 782	1 446
Grapes	n.a.	n.a.	n.a.	11	15	30
Vegetables for sale for human consumption	16 355	21 358	20 573	27 202	27 547	34 700
Other crops (b)	4 450	7 979	11 125	16 221	r 11 275	12 366
Pasture harvested for hay	5 628	8 478	4 141	8 301	7 751	7 687
Pasture harvested for seed	52	128	85	621	433	660
Total	43 009	55 706	53 961	r 76 947	r 70 397	80 324

(a) Excludes crops and pasture harvested for green feed or silage.

(b) Excludes harvested pasture.

The next table shows quantity and value details for the main items comprising the crops sector. Also included in the table is the average value per tonne of production.

Crops: Gross Value, Tasmania 1980-81			
<i>Crop</i>	<i>Production</i>	<i>Gross value</i>	
		<i>Per tonne</i>	<i>Total</i>
	<i>tonnes</i>	<i>\$</i>	<i>\$'000</i>
Crops (excluding pasture harvested)—			
Cereals for grain—			
Barley	18 307	149.77	2 742
Oats	11 146	163.17	1 819
Triticale	11 151	127.17	146
Wheat	2 545	139.40	355
Total cereals for grain .....	..	..	(a) 5 063
Legumes mainly for grain—			
Peas, field	795	240.69	191
Total legumes mainly for grain .....	..	..	(a) 232
Crops for hay (b)	7 531	47.59	358
Fruit—			
Orchard tree fruit—			
Apples	76 033	219.72	(c) 16 706
Pears	2 095	351.77	737
Total orchard tree fruit .....	..	..	(a) 17 782
Berry and small fruit—			
Currants	772	800.75	618
Loganberries	126	921.91	116
Raspberries	416	1 079.48	449
Strawberries	131	1 950.00	256
Total berry and small fruit .....	..	..	(a) 1 446
Grapes	11	265.00	30

continued next page

Crops: Gross Value, Tasmania 1980-81—continued

Crop	Production tonnes	Gross value	
		Per tonne \$	Total \$'000
Vegetables for sale for human consumption—			
Beans, French and runner	10 319	179.89	1 856
Peas, green (ex-shell)	26 552	177.36	4 710
Potatoes	155 965	110.19	17 186
Total vegetables for human consumption .....	..	..	(a) 34 700
Other crops—			
Hops (dry weight)	1 558	3002.34	4 678
Other .....	..	..	7 688
Total other crops .....	..	..	12 366
Total (excluding crops from pasture) ..	..	..	71 977
Pasture (including lucerne) harvested—			
Pasture harvested for—Hay	241 817	31.79	7 687
Seed	575	..	660
Total crops from pasture .....	..	..	8 347
Total all crops .....	..	..	80 324

(a) Includes other crops not specified in the table.

(b) Excludes pasture for hay.

(c) Includes stabilisation payments of *minus* \$204 000 and \$94 000 for payments under the *Apple Industry Assistance Act*.(d) Includes net payments to growers under Government price support schemes of *plus* \$3 273 000.

(e) Includes lucerne.

Average Unit Gross Values: In the next table, average unit gross values for the principal crops are shown for a six-year period. The unit values have been calculated for the principal agricultural products by dividing the total quantity produced into the total gross value of production for each crop. They therefore represent weighted average 'prices' of the product in all markets (including quantities retained for farm use) and indicate trends rather than prices actually paid to farmers.

Average Unit Gross Values: Principal Crops, Tasmania
(\$ per tonne)

Crop	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Cereals for grain—						
Barley	99	111	121	122	124	150
Oats	79	108	123	118	118	163
Triticale .....	..	..	..	..	120	127
Wheat	97	82	86	109	128	139
Legumes mainly for grain—						
Peas, field	155	180	204	197	210	241
Crops for hay	29	50	27	31	38	48
Vegetables for sale for human consumption—						
Beans, French and runner	117	125	133	142	152	180
Peas, green (ex-shell)	147	156	158	158	159	177
Potatoes	77	83	83	102	104	110

continued next page

Average Unit Gross Values: Principal Crops, Tasmania
(\$ per tonne)—*continued*

<i>Crop</i>	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Orchard tree fruit—						
Apples	173	165	202	195	223	220
Apricots	224	217	307	341	453	745
Pears	171	195	261	248	284	352
Grapes	n.a.	n.a.	n.a.	260	262	265
Berry and small fruit—						
Currants	500	550	700	722	780	801
Gooseberries	320	440	500	500	520	553
Loganberries	470	570	730	780	820	922
Raspberries	500	580	740	870	953	1 079
Strawberries	1 600	1 550	1 650	1 680	1 726	1 950
Hops	1 395	1 695	1 957	2 202	2 553	3 002
Pasture—						
Hay	17	25	25	28	32	32
Seed—rye grass	327	497	520	700	860	980

Livestock Slaughterings and other Disposals

For the main categories of livestock, the first of the next two tables shows the gross value of production (including an adjustment for net exports), and the second table the average prices paid to farmers for livestock sold for slaughter.

Livestock Slaughterings and Other Disposals (a): Gross Value, Tasmania
(\$'000)

<i>Particulars</i>	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Cattle and calves	20 740	27 686	33 915	60 713	65 462	56 599
Sheep and lambs	5 710	9 565	11 655	20 455	21 384	23 451
Pigs	5 481	6 028	5 790	6 378	8 023	7 928
Poultry	2 121	2 824	3 416	4 191	4 903	5 926
Goats	n.a.	n.a.	n.a.	n.a.	560	176
Total	34 052	46 103	54 776	91 737	100 332	94 080

(a) Includes an adjustment for net export of live animals.

Average Livestock Prices, Tasmania (a)
(\$)

<i>Livestock</i>	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Cattle (other than calves)	71.24	90.10	103.55	240.39	337.14	282.14
Sheep	2.75	5.76	7.67	14.46	12.09	13.09
Lambs	8.10	11.49	12.05	18.58	21.59	20.07
Pigs	58.27	60.11	62.37	69.67	90.25	89.32

(a) Estimated average prices, on the hoof, of livestock sold for slaughter.

Livestock Products

A wide range of goods are manufactured in Tasmanian factories from livestock products. The two major products, wool and milk, in terms of gross value, accounted for 51 and 44 per cent of the total respectively, in 1980-81.

Details of gross values for livestock products for years 1975-76 to 1980-81 are shown below:

Livestock Products: Gross Value, Tasmania
(**\$'000**)

<i>Particulars</i>	<i>1975-76</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Wool—						
Shorn (including crutchings)	27 139	33 000	34 559	39 867	47 725	49 257
Fellmongered and exported on skins ..	1 281	1 993	2 349	2 175	3 224	1 509
Total	28 420	34 993	36 908	42 043	50 948	50 767
Dairy products, whole milk used for—						
Processing	21 085	24 462	26 102	32 346	30 092	34 581
Human consumption and other purposes	7 669	8 601	8 693	7 7892	8 287	9 219
Total dairy products	28 754	33 063	34 795	40 238	38 379	43 800
Eggs	3 031	3 595	3 751	3 815	3 795	4 947
Honey	446	410	623	613	517	665
Beeswax	21	14	31	35	35	40
Total livestock products	60 672	72 075	76 108	86 744	93 674	100 219

Value of Agricultural Products: Summary

In the table that follows *gross* and *local* values of production for all agricultural commodities are shown for the last six years:

Agricultural Commodities Produced: Gross and Local Value, Tasmania
(**\$'000**)

<i>Particulars</i>	<i>1975-76</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
<i>Crops (a)</i>						
Gross value of production	43 009	55 706	53 961	76 936	70 397	80 324
Less Marketing costs	7 779	7 003	6 114	8 176	8 741	9 226
Local value of production	35 230	48 703	47 847	68 760	61 656	71 098
<i>Livestock Slaughtering and other Disposals</i>						
Gross value of production	34 052	46 103	54 776	91 737	100 332	94 080
Less Marketing costs	3 010	3 904	6 921	11 540	12 960	11 685
Local value of production	31 042	42 199	47 855	80 197	87 372	82 395
<i>Livestock Products</i>						
Gross value of production	60 672	72 075	76 108	86 744	93 674	100 219
Less Marketing costs	3 681	3 899	3 953	4 087	4 673	5 115
Local value of production	56 991	68 176	72 155	82 657	89 001	95 104
<i>Total Agriculture (a)</i>						
Gross value of production	137 733	173 884	184 845	255 417	264 403	274 623
Less Marketing costs	14 470	14 806	16 988	23 803	26 374	26 026
Local value of production	123 263	159 078	167 857	231 614	238 029	248 597

(a) Excludes crops and pastures harvested for green feed and silage. No adjustment has been made to reduce totals in respect of intermediate production crops (e.g. stock feed) used on the holdings on which produced and not sold.

DEPARTMENT OF AGRICULTURE, TASMANIA

The functions of the Department of Agriculture are broadly three-fold: regulation, extension or advice, and research.

The regulatory function is the administration of laws relating to agricultural production and the protection of the health of livestock and crops. It includes the operation of port inspection and quarantine facilities and responsibility for the development of policy and continuing review of the Acts and Regulations.

In the performance of its extension function the Department provides information and advice on all aspects of agricultural production, and encourages the adoption of proven agricultural practices to increase efficiency. Specialist officers in the Department report on aspects of Tasmanian agriculture to parliamentary or other commissions and inquiries.

Research is undertaken at research centres in Hobart, Launceston and Devonport and at five research stations in various parts of the State. This research provides the scientific basis for the extension and regulation functions.

The Department is administered by an operational Board of Management comprising the Secretary, who is the Head of the Department, and the heads of the five operational Services with responsibilities in the area of plants, animals, planning and co-ordination, resources and administration. The Head Office is in Hobart, and there are offices in each of fifteen districts covering the whole State, including the Bass Strait Islands.

Total expenditure by the Department of Agriculture from Consolidated Revenue in 1981-82 was \$13.3 million, compared with \$12.1 million in 1980-81.

GOVERNMENT FINANCIAL ASSISTANCE TO RURAL PRODUCERS

The Agricultural Bank of Tasmania

The State Advances Act

In 1907 the Government of the day passed the *State Advances Act* to set up the Agricultural Bank of Tasmania for the purpose of providing financial assistance to a limited section of the rural community.

Just prior to the legislation being enacted, a considerable amount of indiscriminate selection of Crown land had taken place. Most of the settlers had used what small resources they had on development. The location of their holdings and the nature of their proposals were such that normal financial institutions were not interested in providing the further finance required. It was to help these settlers that the Bank was established.

Over the years the legislation was widened and today loans are made to persons engaged in rural industries, irrespective of the nature of the tenure of their holdings, for many of their requirements. Finance is most frequently requested for: the purchase of farm properties; refinancing of mortgages; the purchase of livestock, plant and equipment; land development; structural improvements; and land irrigation. Loans are also made to professional fishermen. During the year ended 30 June 1981, loans totalling \$6.81m were approved for these purposes. Loans outstanding at 30 June 1981 totalled \$21.29m.

During the financial year 1979-80 the Agricultural Bank of Tasmania was admitted as a Prime Lender in respect of the refinancing facilities of the Primary Industry Bank of Australia Ltd. The objectives of the Primary Industry Bank of Australia include the provision of long-term loan funds to primary industry, fostering the continuing efficiency of Australia's primary industries, enhancing the predictability of primary industry borrowing and increasing the volume of funds flowing to primary industries. Until 30 June 1981 loans totalling \$2 213 000 were funded.

Special Relief

It has been the practice of governments to channel assistance to rural industries through the Agricultural Bank and over the years more than 30 items of rural legislation have been administered. Some have been in respect of State Government assistance only and others in respect of joint assistance by State and Federal Governments. Much of this legislation has been directed at alleviating conditions of hardship following droughts, fires, floods and market downturns.

In July 1979 following a prolonged spell of dry weather in the South East and East of the State the State Government provided assistance to primary producers in areas declared as drought affected under the provisions of the *Primary Producers Relief Act* 1968. Sixteen municipalities remained declared as drought affected at 30 June 1981.

Assistance was approved in the form of loans and subsidies to bona fide primary producers farming in drought proclaimed areas who receive their principal source of income from farming. Loans approved for carry-on purposes totalled \$150 000 and freight subsidies amounted to \$90 000. The amount outstanding at 30 June 1980 in respect of loans advanced under the *Primary Producers Relief Act (No. 2) 1947*, the *Flood Relief Act* 1960 and the *Fire Damage Relief Act* 1967 was \$0.64m.

Other Rural Activities of the Bank

In addition to the provision of loans under the *State Advances Act*, the Agricultural Bank also currently provides assistance under the *War Service Land Settlement Act* 1950, the *Closer Settlement Act* 1957, and the *Rural Adjustment Act* 1977. The purposes and provisions of these Acts are briefly outlined in the following sections.

Closer Settlement Scheme

Under this scheme the Agricultural Bank may, under certain conditions, acquire freehold land; it can appropriate Crown land and it can purchase land by negotiation. Land so obtained may be developed into farms for allotment to eligible persons. Developed or partly developed farms may also be purchased and allotted and available funds have been directed to this end in recent years.

Properties are made available on a 99-year lease with an option to purchase the freehold. Persons obtaining properties may receive loans to enable them to carry on farming operations. During the year ended 30 June 1981 four properties were purchased and allotted.

To encourage the settlement of young people on the land the *Closer Settlement Act* 1957 was recently amended. This amendment extended the term of the development lease period from 5 to 10 years and in addition it was agreed to keep interest rates in the early years to a minimum. The two initiatives will enable the young settler to improve his equity in the purchased property.

War Service Land Settlement

In 1944-45 the Federal and State Governments reached agreement on a scheme for the settlement of ex-servicemen on farming properties. Large areas of land were investigated and subsequently over 180 000 hectares were purchased for development and allotment to eligible ex-servicemen. All holdings have been allotted as grants in perpetuity at a pre-determined rental. After a period of six years a settler may, subject to conditions laid down in the Act, exercise a right to convert the property to a freehold title by payment of an option price determined at the time of allotment, or he may transfer his interest in the holding to a person not entitled to receive an allotment under the Scheme.

At 30 June 1981, 127 properties developed under this scheme were occupied by the original settlers, a further 97 settlers had exercised their option to purchase the freehold on their properties, and 255 properties had been re-allocated or were occupied by other than eligible ex-servicemen.

Rural Adjustment Scheme

On 4 June 1971 an agreement was signed between the Federal Government and the State of Tasmania, the object being the implementation of a national scheme of rural reconstruction; in essence, the Federal Government provides the financial assistance but the detailed administration is vested in the State. Similar federal-state agreements were entered into by the other Australian states on the same date. In October 1971 the Tasmanian Parliament passed the *Rural Reconstruction Act* 1971 which established the mechanism for administering the scheme in Tasmania.

As from 1 January, 1977 a further agreement between the Federal and State Governments provided for a Rural Adjustment Scheme.

The Agreement combines into one comprehensive scheme the various forms of rural adjustment which previously had been provided under separate legislation, namely the *Rural Reconstruction Act 1971*, *Dairy Adjustment Program Act 1975* and the *Beef Industry Assistance Act 1975*. The Scheme provides the following forms of assistance:

Debt Reconstruction

Loans may be made available for the re-arrangement and/or consolidation of a farmer's debt so as to spread the repayments over a longer period and thereby reduce the annual debt-servicing commitment. The problem should be an industry one and not due to circumstances within the farmer's control.

Farm Build-up

Farm build-up involves the provision of finance to assist the amalgamation of properties too small to be economic under current conditions. A viable farmer may be assisted to purchase an adjacent uneconomic property.

Farm Improvement

Finance may be available to assist the restoration of an uneconomic property to viability by increasing productive capacity of the farm without adding to its size.

Carry-on Assistance

This involves the provision of finance for essential carry-on purposes to farmers in industries which Commonwealth and State Governments agree are suffering severe market downturn, excluding circumstances covered by natural disaster arrangements.

Rehabilitation Assistance

Assistance of up to \$5 000 is available to a farmer obliged to leave the industry where that assistance is needed to alleviate personal hardship.

Household Support

This assistance is available for up to one year to a farmer and is equivalent to what his entitlement under Unemployment Benefits would be if he were eligible for such benefits. It is available while he decides whether to adjust out of farming. The assistance may be extended for a limited period beyond one year in special circumstances.

The following table summarises details of approvals under the *Rural Adjustment Act 1977* from 1 July 1980 to 30 June 1981.

Rural Adjustment Assistance, Tasmania, 1980-81

Type of Assistance	Applications		Assistance approved
	Considered	Approved	
	no.	no.	\$'000
Farm build-up	10	8	418
Debt reconstruction	1	1	—
Farm improvements	—	—	—
Rehabilitation	—	—	—

Fruitgrowing Reconstruction Scheme (Tree Removal)

The acceptance of applications for assistance under this Scheme concluded on 31 December 1976; trees had to be removed by 31 August 1977. The total assistance received by orchardists for the removal of trees was \$2 059 212; 3 268 hectares of orchard was removed.

Further References

ABS Publications Produced by the Tasmanian Office

Principal Agricultural Commodities, Tasmania (Preliminary) (7111.6), annual.
Livestock and Livestock Products, Tasmania (7221.6), annual.
Crops and Pastures, Tasmania (7321.6), annual.
Apples and Pears in Cool Stores, Tasmania, monthly, seasonal; June to November.
Fruit, Tasmania (7322.6), annual.
Agricultural Land Use and Selected Inputs, Tasmania (7411.6), annual.
Value of Agricultural Commodities Produced, Tasmania (7501.6), annual.

ABS Publications Produced by the Canberra Office

Agricultural Industries Structure of Operating Units (7102.0), annual.
Principal Agricultural Commodities, Australia (7201.0), annual.
Shearing and Wool Production Forecast (Preliminary Estimates) (7210.0), annual.
Sheep Numbers, Shearing and Wool Production Forecast (7211.0), annual.
Cereal Grains: Estimates of Intended Sowings (7304.0), annual.
Cereal Grains: Estimates of Area Sown (7305.0), annual.
Gross Value of Agricultural Commodities Produced, Australia (Preliminary) First Estimates (7501.0), annual.
Value of Agricultural Commodities Produced, Australia (7503.0), annual.
Australian Farming in Brief (7106.0), annual.
Selected Agricultural Commodities, Australia (Preliminary) (7112.0), annual.
Livestock and Livestock Products, Australia (7221.0), annual.
Livestock Products, Australia (Preliminary) (7215.0), monthly.
Viticulture, Australia (Preliminary) (7311.0), annual.
Viticulture, Australia (7310.0), annual.
Cereal Grains: Estimates of Area Sown, Australia (7312.0), annual.
Crops and Pastures, Australia (7321.0), annual.
Fruit, Australia (7322.0), annual.
Agricultural Land Use and Selected Inputs, Australia (7411.0), annual.
Value of Agricultural Commodities Produced, Australia (Preliminary) Second Estimates (7502.0), annual.
Agricultural Industries: Financial Statistics, Australia (7507.0), annual.
Agricultural Industries: Financial Statistics, Australia (Preliminary) (7508.0), annual.

CHAPTER 13

FORESTRY, MINING, AND FISHING

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Chapter 13

FORESTRY, MINING AND FISHERIES

FORESTRY

Introduction

When the first explorers ventured beyond the main coastal areas of mainland Australia, they encountered arid zones and desert nearly devoid of timber. By contrast, in Tasmania dense and continuous forest was the main barrier to early penetration, although the early settlements were sited in open savanna-like country which originated from firing by the Tasmanian aboriginals. No other Australian state has similar widespread conditions favourable for forest growth: a cool temperate climate; and an assured annual rainfall varying from 500 to 3 800 millimetres according to locality, and showing relatively small seasonal variation.

During the period since the first settlement in 1803, land clearing, timber exploitation and fires have left their mark; however the Forestry Commission estimates that the current total forest area (including some forest of little or no commercial value) is 2 779 000 hectares (i.e. about 40 per cent of the State's total area of 68 300 sq km).

Forest Area

Of all the Australian states, Tasmania is unique in its concentration of forest resources. Native forests of potentially commercial quality cover 2 214 000 hectares (or 32 per cent of the State's area). Of this area 950 000 hectares are privately owned and 126 400 hectares are Crown-owned commercial forests.

The need for permanent reservation of land for timber production was first officially recognised by the *Waste Lands Act* 1881 and the first forest reservation occurred in the late 1880s when some 21 270 hectares were gazetted. Reservations had reached 403 660 hectares by 1910 and 651 890 hectares at the time of World War II. An on-going program of dedication of suitable lands as State forests in perpetuity is a firm undertaking in the Commission's policy. The gazetted area at 30 June 1982 was 1 542 471 hectares towards a target of 1 618 000 hectares of permanent State-owned forests managed for the benefit, both material and environmental, of future generations. In addition to the State forests there are 'timber reserves' (land reserved for the supply of timber, including fuel); at 30 June 1982 the forested area of state forest and timber reserves was 1 266 400 hectares.

The State forests are located, in the main, in five distinct regions: (i) far north-west about the axis of the Arthur River; (ii) north-eastern highlands; (iii) north and north-west of the Great Lake; (iv) from the south coast, north to Lake King William; and (v) the east coast area.

Classification of State Forests and Timber Reserves

A classification of State forests, timber reserves and land acquired for forestry purposes is set out in the following table:

Classification of State Forests and Timber Reserves, Tasmania at 30 June 1981
(*000 Hectares)

Forest type	Area
Eucalypt forest with a mature or potential mature height over 41 m	377
Eucalypt forest with a mature or potential mature height of 15m to 41m	720
Temperate rain forest (<i>N. cunninghamii</i>) and associated species	172
Plantations — Softwood (mainly <i>pinus radiata</i>)	34
— Hardwood	1
Total productive forest area	1 304
Non-productive forests and other land included for protection purposes	301
Total	1 605

Timber Concession and Reserve Areas

The establishment in Tasmania of various industries using forest resources has given rise to the need for some guarantee of assured timber supplies to those industries. Therefore, certain concessions and cutting rights on Crown lands have been awarded to companies relying on forest products as their raw materials. The map on the following page shows the location of concession and reserve areas in Tasmania. Cutting rights apply only to Crown Land and state forest within the boundaries. Concession areas are those areas where a company is at present allowed to operate while reserve areas are set aside for future use. Providing that the company meets certain stipulated conditions, permission to remove timber from the reserve area will be granted by the Forestry Commission.

Plantations

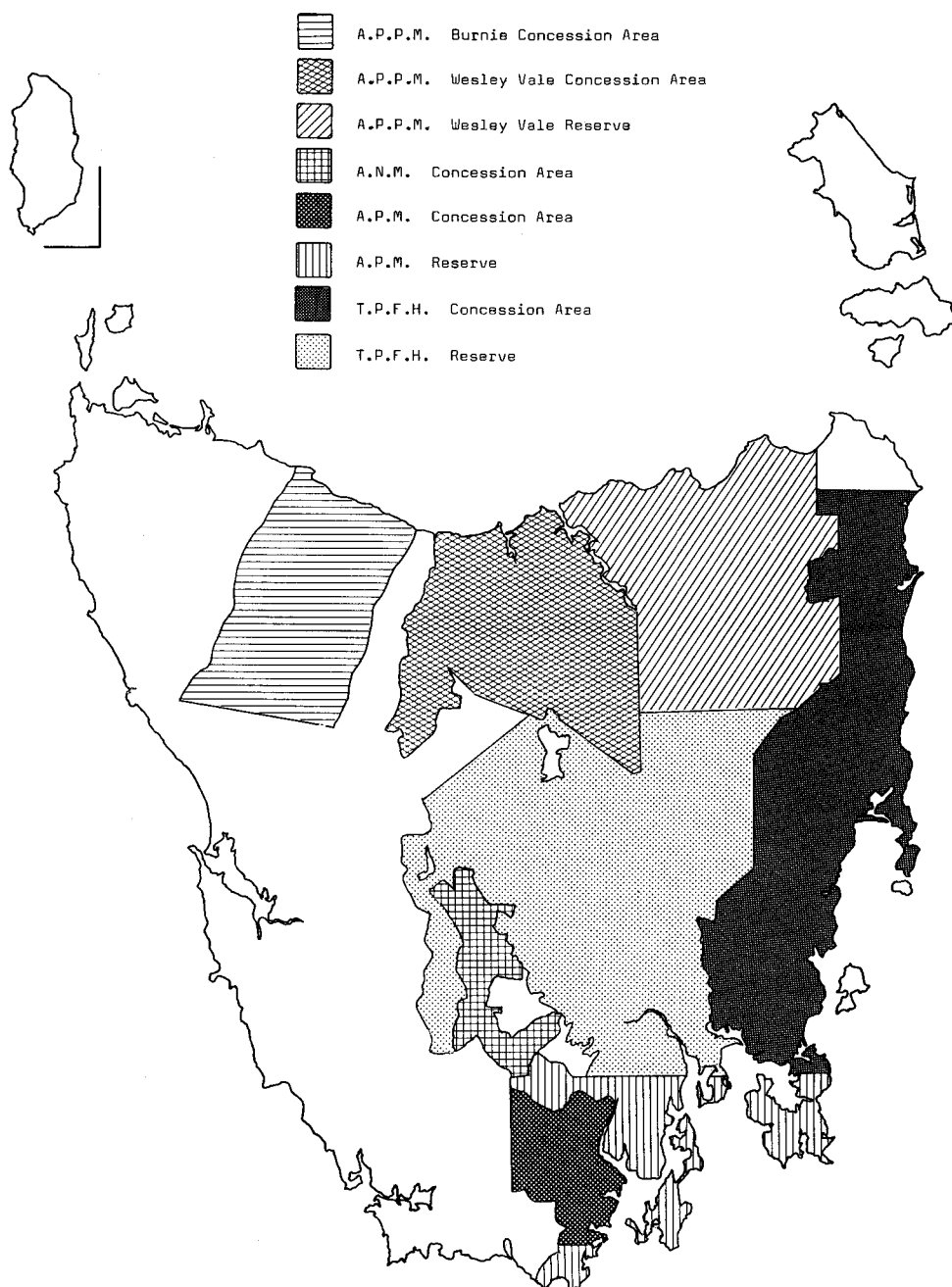
The scarcity of native softwoods is being met, in part, by the creation of exotic plantations, the principal species grown being *Pinus radiata*, but at 30 June 1982 softwoods plantations (57 000 hectares) accounted for only 2 per cent of the State's total forested area. The Forestry Commission had established almost 35 000 hectares of softwood plantations in Tasmania by 30 June 1981.

The following table shows the area of softwood and hardwood plantations established by the Forestry Commission (but excludes privately owned areas):

Area of Forestry Commission Plantations, Tasmania at 31 March
(Hectares)

District	1980			1981		
	Softwood	Hardwood	Total	Softwood	Hardwood	Total
Smithton	9	—	9	9	—	9
Burnie	3 067	290	3 357	3 136	292	3 428
Devonport	6 236	17	6 253	6 686	40	6 726
Queenstown	2 293	—	2 293	2 348	—	2 348
Launceston	896	82	978	933	113	1 046
Deloraine	—	115	115	4	144	148
Scottsdale	8 718	27	8 745	8 964	54	9 018
Fingal	11 708	56	11 764	11 941	68	12 009
Triabunna	—	91	91	—	91	91
Geeveston	89	300	389	98	355	453
Total	33 016	978	33 994	34 119	1 157	35 276

In May 1974, following the calling of tenders for cutting rights in *Pinus radiata* plantations in the north-east of Tasmania, a substantial sale of sawlogs was made and resulted in the establishment of a milling complex near Scottsdale. The green mill was destroyed by fire in February 1978. This was rebuilt and operations resumed in March 1979. The production level reached the levels allowed for in the 1974 tender later in the year.

PULPWOOD CONCESSION AREAS (a)

(a) Cutting rights apply only to Crown Land and State Forests within these boundaries.

Tasmanian Forest Types

The productive, commercially harvested native forest estate consists of three main vegetation types: dry sclerophyll, wet sclerophyll and mixed forest (sclerophyll means hard leaved, i.e. eucalypt). Dry forest occurs predominantly on the east coast, wet sclerophyll in the north west, and north east highlands. Mixed forest consisting of eucalypts with rainforest understorey species occurs where rainfall is above 1130 mm p.a. Rainforest is characterised by the dominance of myrtle (*Nothofagus cunninghamii*), sassafras (*Atherosperma moschatum*) and leatherwood (*Eucryphia lucida*). No timber harvesting operations occur in stands of pure rainforest. Blackwood (*Acacia melanoxylon*) grows where rainforest has been disturbed in the past, principally by fires.

Good quality eucalypt forests are uncommon on soils of reasonable depth and fertility where the annual rainfall is below 760 mm. Where the rainfall is above 1130 mm, rain forest species appear in the understorey but are excluded should fires occur, say, every 40 to 50 years. With rainfall above 1520 mm rain forests can exclude eucalypts. However, even with rainfall well above 1520 mm, a combination of poor soils and frequent burning often produces areas of button grass and heathy plains.

Tasmanian forests are cut almost exclusively for hardwood (eucalypts), the slow growing native softwoods never having been very plentiful. The principal softwood species which have been utilised are *Athrotaxis selaginoides* (king billy pine), *Dacrydium franklinii* (huon pine) and *Phyllocladus aspleniifolius* (celery-top pine).

Hardwoods: The most valuable eucalypts are those which belong to the so-called ash group—*E. obliqua* (stringy-bark), *E. delegatensis* (gum-top stringy-bark or alpine ash) and *E. regnans* (swamp gum or mountain ash). In the south and south-east *E. globulus* (Tasmanian blue gum) occurs in high quality forests. In areas where the annual rainfall is below 760 mm, the more important eucalypts are *E. amygdalina* (black peppermint), *E. ovata* (swamp or black gum), *E. viminalis* (white gum), *E. obliqua* (stringy-bark) and *E. linearis* (white peppermint).

Tasmania offers 11 tree types suitable for pulpwood, of which 10 are eucalypts. The eleventh is the myrtle (*Nothofagus cunninghamii*), a rain forest hardwood available in the north-west of the island. The eucalypts can be graded into:

- | | |
|--|---|
| (i) First quality (four species)— | <i>E. obliqua</i> (stringy-bark) (a) (b) |
| | <i>E. delegatensis</i> (gum-top stringy-bark) (a) (b) |
| | <i>E. regnans</i> (swamp gum) (b) |
| | <i>E. sieberi</i> (ironbark) |
| (ii) Second quality (three 'gums')— | <i>E. viminalis</i> (white gum) (a) (b) |
| | <i>E. globulus</i> (blue gum) (a) |
| | <i>E. ovata</i> (swamp or black gum) (b) |
| (iii) Third quality (three 'peppermints')— | <i>E. amygdalina</i> (black peppermint) (a) (b) |
| | <i>E. linearis</i> (white peppermint) |
| | <i>E. tasmanica</i> (silver peppermint) |

Two species of eucalypt—*E. delegatensis* and *E. obliqua* account for over 60 per cent of all eucalypt logs cut for woodchipping. The east coast offers all 10 varieties of which the five marked (a) are the common ones. The north coast offers, in useful quantity, only the six varieties marked (b).

Softwoods: Although Tasmania's native forests produce some very valuable softwood timber, these are very slow growing and in short supply. For this and other reasons, attention has been given to building up another section of the total forest estate—namely, plantations of exotic species, particularly *Pinus radiata*. At mid-1981 there were 35 000 hectares of State owned pine plantations with another 22 000 hectares on private land.

RAINFOREST



Rainforest
dominated by
myrtles (*Nothofagus
cunninghamii*)
near Adamsons Peak
Edward Gall

Following Pages

Ancient sassafras trees (*Atherosperma moschatum*) covered with mosses and lichens
in the Weld River rainforest

Manferns (*Dicksonia antarctica*) predominate the understory near the Weld River
King William pines (*Athrotaxis selaginoides*) at Cradle Valley, Northern Tasmania

Edward Gall







Forest Utilisation

Introduction

An extensive sawmilling industry has been a major and traditional part of the Tasmanian scene since the mid 19th century. This was originally an industry solely reliant on native forests for its raw material, although now (and in the future) plantations of exotic softwoods play an important role in supplying the industry. For a number of years usage of logs for sawing, peeling and slicing remained at over 1 000 000 cubic metres per annum but usage has dropped since 1974-75 to a level of 863 000 cubic metres in 1981-82, when 327 000 cubic metres of sawn, peeled and sliced timber was produced.

However, typical native forests produce much wood not suitable for sawmilling and in 1937 a start was made on the use of this previously wasted resource for the manufacture of paper at Burnie. Since that time, the use of pulpwood has expanded, particularly in the present decade, producing pulp paper, building panel-boards and raw woodchips. In 1941 the only newsprint mill in Australia was established at Boyer on the Derwent; in 1962, a pulp mill began operations at Port Huon in the south. A further pulp and paper mill commenced production during 1970 at Wesley Vale near Devonport. Further utilisation of forestry products has been introduced by factories producing plywood, hardboard, particle board and woodchips (for export).

Establishment of the woodchip industry and the expansion of other timber-using industries has resulted in greatly increased annual timber requirements necessitating careful utilisation of existing forest resources and the development of viable reafforestation schemes.

The problem of possible overtaxing of existing resources has been met partly by the implementation of fully integrated forest operations wherever possible. These operations ensure maximum use of the resource, with the best logs going to sawlogs and the remaining merchantable timber being processed as pulpwood. This also facilitates regeneration of the forest as most of the standing trees are removed, hence decreasing competition for available nutrients and light.

Pulpwood is also obtained from waste produced during sawmilling. During 1969-70, the year preceding the first export of woodchips, approximately 25 per cent of sawmill waste was chipped for re-use. As a direct consequence of the woodchip export trade the proportion rose to over 60 per cent in 1976-77 and had reached nearly 80 per cent in 1979-80.

Thinnings from Forestry Commission *Pinus radiata* plantations are used for sawlogs, treated fence posts, particle board manufacture at Wesley Vale and production of pulp for manufacture of paper at Burnie, Wesley Vale and Boyer.

Regeneration of areas harvested is carried out by the Forestry Commission and by the companies themselves. On Crown land reafforestation is mandatory, the work in some areas being done by the companies and in other areas by the Forestry Commission. Industries utilising privately owned forest resources have established incentive schemes to encourage reafforestation.

Total Log Usage

The next table shows total log usage by the sawmilling, paper making, chipping and allied industries for recent years:

Hardwood and Softwood Log Usage, Tasmania
(^{000m})

Year	Sawmilling and plywood milling	Chipping, grind- ing and flaking	Total
1976-77	986	2 913	3 900
1977-78	906	2 751	3 658
1978-79	863	2 941	3 803
1979-80	942	3 594	4 536
1980-81	992	3 370	4 362
1981-82	863	3 071	3 933

Timber Using Industries

Normally the Bureau does not publish information relating to any single enterprise or establishment but only publishes statistical aggregates where these do not directly or indirectly reveal the operations of any single informant. However, a description of some of the State's major timber using companies is obviously desirable; therefore, the Forestry Commission has supplied the details given below.

Paper, Hardboard and Particle Board

Associated Pulp and Paper Mills Ltd and subsidiaries manufacture paper at Burnie and particle board and paper at Wesley Vale. Their hardboard mill closed at the end of the 1977-78 financial year after 27 years production, largely due to a significant decrease in demand by the export market and the highly competitive nature of the reconstituted wood panelling industry in Australia. The Company owns 101 172 hectares of forested land and holds cutting rights over Crown land for 24 kilometres on each side of the Emu Bay railway line from the north coast to the Pieman River.

In 1970 the Company completed the first stage of its pulp and paper mill at Wesley Vale at a cost of \$25 million. The first paper machine installed has an annual capacity of 41 000 tonnes of magazine paper and provision has been made for the installation of three additional machines. However, expansion at Wesley Vale has been deferred due to economic conditions and the difficulty of financing the very high capital cost of the project at the present. An alternative expansion project at the Burnie mill costing \$25 million to produce bleached, softwood pulp from Company and Forestry Commission softwood plantations has been completed.

Newsprint

Australian Newsprint Mills Ltd situated at Boyer on the Derwent River is one of two mills producing newsprint in Australia. Its timber concession follows the general line of the Derwent as far north as Lake King William.

The *Florentine Valley Paper Act* 1966 increased ANM's concession area from 110 479 hectares to 150 948 hectares to provide the basis for an expansion program. The Company is required by the Act to supply 30 100 cubic metres of logs to other timber-using industries each year. The plant ran at almost full capacity during 1977-78 and produced 208 000 tonnes of newsprint. Machinery was installed in 1978 to manufacture a special type of thermo-mechanical pulp from *Pinus radiata* which will partly replace imported Kraft chemical pulp. The *Pinus radiata* pulpwood for this project is being drawn from thinnings from the Forestry Commission *Pinus radiata* plantations near Scottsdale.

Woodpulp

Australian Paper Manufacturers Ltd which manufactured woodpulp at Port Huon for shipment to the company's paper mills in other states, closed in October 1982 for a two year period. The Company's pulpwood concession and reserve areas include virtually the whole of the D'Entrecasteaux Channel coastline and the south coast as far west as Prion Bay; inland it extends west to the Mt Picton area. Also included in the reserve are Bruny Island and the Tasman Peninsula.

Woodchips

Woodchips manufactured from sawmill waste and other timber previously of limited commercial value, are primarily used for woodpulp production. Three Tasmanian companies, Forest Resources, Tasmanian Pulp and Forest Holdings Ltd and Associated Pulp and Paper Mills Ltd have woodchip export contracts with Japanese interests. Before granting woodchip export licences, the Federal Government stipulated that the companies, if they did not already have the capacity, should develop woodpulp manufacturing facilities within 15 years. The export of woodchips from Tasmania commenced in 1971. Articles on each of the three companies' woodchip operations were included in the 1975 edition of the *Year Book*.

The plant of Tasmanian Pulp and Forest Holdings (a subsidiary of APPM) at Spring Bay, near Triabunna on the east coast, has an annual capacity of more than 610 000

tonnes of woodchips. Timber for the project comes from pulpwood concession areas extending along the Eastern Tiers over some 220 kilometres from Murchison in the south to Eddystone Point in the north. The Company has also been granted concessions over reserve areas covering much of central Tasmania. These areas will ultimately be used provided Tasmanian Pulp and Forest Holdings Ltd meets various stipulations contained in the *Pulpwood Products Industry (Eastern and Central Tasmania) Act 1968*. In addition, the Company is permitted to obtain pulpwood from areas in the reserve set aside by the Forestry Commission for silvicultural purposes or by utilising trees removed to open the forest for economic extraction of milling-quality timber.

The Company's first woodchips were exported from the Spring Bay complex in April 1971; since then, the Company has exported approximately 600 000 tonnes of woodchips per annum.

Associated Pulp and Paper Mills Ltd and Forest Resources constructed their woodchip plants at Long Reach, near Bell Bay, on the Tamar River. Forest Resources has also installed portable and satellite chipping plants in the northern half of Tasmania. APPM Ltd draws its timber supplies from Crown forest concessions, private land and sawmill waste, while Forest Resources relies on timber from private lands and sawmill waste. Annual capacity of the APPM Ltd plant is 914 500 tonnes of woodchips; Forest Resources 15-year export contract is for an annual 711 000 tonnes of woodchips.

Both companies commenced production of woodchips in 1972; APPM at its Long Reach plant in May 1972 and Forest Resources from its portable and satellite chipping plants in mid-1972. First exports by the two companies were made in late 1972. In February 1973 the first log trains commenced using the rail extension to Long Reach giving the two companies economic access to more distant timber supplies.

In September 1979, Associated Pulp and Paper Mills Ltd were successful in a take-over bid for Tasmanian Pulp and Forest Holdings Ltd. Tasmanian Pulp and Forest Holdings Ltd continued to trade as a separate company to Associated Pulp and Paper Mills Ltd's export operations in the north of the State.

In 1979, Forest Resources signed a contract with the Forestry Commission of Tasmania to harvest a maximum of 220 000 tonnes of pulpwood per year from State forests in the far north-west of the State. This pulpwood was to be in the form of forest residues from the existing sawmill operations in this area, together with standing fire-killed trees. This wood was to be taken under Northern Woodchips' existing export licence and in lieu of standing green pulpwood from private property.

The State Forestry Commission

The principal officers of the State Forestry Commission are the Chief Commissioner and three Assistant Commissioners. At 30 June 1982 the Commission employed a work force of 686 including administrative staff.

The Forestry Commission is primarily concerned with the conservation of Tasmania's State Forests; this requires that it exercise control over the rate at which logs and pulpwood are taken, and also that it introduce effective measures to ensure regeneration. Other important functions include: (i) road construction, providing access to State forests; (ii) maintaining an annual program of softwood planting; (iii) protection of the forest estate from damage by fire, insects and disease; (iv) research, which aims to improve forest health and growth while developing more effective techniques of forest regeneration and fire protection; and (v) the management of State forests for recreation and wildlife conservation.

Private Forestry

The Forestry Commission's responsibility for State forests was widened by the *Forestry Act 1977*, which empowered the Commission to promote the development and proper management of private forests. The Act provided for a Private Forestry Council to advise the Forestry Commission on private forestry and a Private Forestry Division to

provide advice and assistance to forest owners. Both these organisations were officially established in September 1978.

The activities of the Private Forestry Division have many facets, extending well beyond the administration of financial assistance schemes. It has to consider and recommend on the wide use of the private forest resource, which is of major importance to Tasmania's on-going industrial potential. An inventory review of the private forest resource and a survey of the loss of forest to agriculture have been commenced. Together, these will determine an acceptable rate of private forest cutting and the need for assistance in reafforestation.

Six assistance schemes have been established: The Pine Plantation Development Loan Scheme; the Pine Plantation Annuity Scheme; the Pine Plantation Nursery Stock Grant Scheme; the Native Forest Restoration Grant Scheme; the Eucalypt Plantation Grant Scheme and the Special Species Grant Scheme. An amenity forestry assistance scheme was introduced in 1982 called Treescape. This scheme provides financial assistance for tree planting projects (other than for commercial timber production) on rural land.

The Division has an expanding role in educating and advising landowners on the management, protection and sale of timber from existing forests. A wide range of informational material has been produced. The response from landowners is such that the Private Forestry Division will be fully committed in implementing the provisions of the Act.

Activities of the Forestry Commission, Tasmania: Summary
(Source: Forestry Commission)

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Area prepared for regeneration						
burning .....ha	5 316	5 484	5 011	7 105	7 287	6 590
Seedlings produced .....000	3 849	2 810	3 385	3 336	4 356	3 818
Plantations—						
Established during year ...ha	1 965	1 966	1 920	1 527	1 596	1 626
Pruned .....ha	561	813	159	417	534	485
Thinned .....ha	351	360	399	497	688	482
Firebreaks—						
Constructed .....km	68	62	82	110	63	51
Roads—						
Constructed .....km	168	137	128	130	118	80
Improved .....km	24	34	9	80	32	28

The Commission has a responsibility for controlling forest fires on or near State forests; losses through bush fires fought by the Commission in recent years are reported in the following table:

Bush Fires Fought by the Forestry Commission, Tasmania
(Source: Forestry Commission)

Year	Fires reported	Area burnt				Cost of suppression
		State forest	Other Crown land	Private property (a)	Total (a)	
	no.	hectares	hectares	hectares	hectares	\$
1976-77 ..	59	2 701	141	669	3 511	40 191
1977-78 ..	199	17 580	6 369	n.a.	23 949	209 553
1978-79 ..	90	2 602	1 333	419	4 354	63 608
1979-80 ..	183	21 100	3 403	n.y.a.	n.y.a.	460 483
1980-81 ..	141	5 597	15 694	n.y.a.	n.y.a.	715 341
1981-82 ..	163	17 956	58 337	n.y.a.	n.y.a.	605 531

(a) Includes only those fires on private property fought to protect adjoining State forest or timbered Crown land.

Total expenditure by the Commission during 1980-81 was \$20.2m. This expenditure was funded from Loan Funds, Consolidated Revenue, funds provided under the *Softwoods Forestry Agreement Act 1976* and monies made available for unemployment relief. Money collected each year (mainly from timber royalties) is paid into Consolidated Revenue and, by law, becomes a grant to the Commission the following year.

The main revenue of the Forestry Commission is derived from royalties, i.e. charges paid by those taking timber from Crown lands. By law, such revenue is specifically reserved for expenditure on forestry. The next table has been compiled to show the revenue and expenditure of the Commission for the last six years; expenditure exceeds revenue since money from State loan funds devoted to forestry purposes is included in expenditure.

Forestry Commission: Revenue and Expenditure, Tasmania
(\$'000)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82
<i>Revenue</i>					
Royalties	4 638	5 083	8 063	9 771	9 910
Road charges	679	695	908	1 072	1 973
Other	298	269	289	321	349
Total	5 615	6 047	9 260	11 164	12 232
<i>Expenditure (a)</i>					
Forest management—					
Regeneration	686	836	950	1 108	1 205
Forest Roads	3 034	2 820	3 479	3 260	3 175
Mapping & survey	731	792	802	922	1 125
Plantations	2 771	2 636	2 579	2 668	3 152
General	7 684	8 200	8 782	10 318	10 650
Fire protection	815	630	1 185	961	1 292
Silvicultural research	836	777	956	967	722
Total	16 557	16 691	18 733	20 204	21 321

(a) Aggregate expenditure from all sources, i.e. Consolidated Revenue, Loan and Trust Funds.

Federal Government-State Agreement

The Federal *Softwoods Forestry Agreement Act 1967* was passed with the specific intention of increasing the rate of softwood-plantings in Australia by providing Federal financial assistance to the states. Under the Act each state was allocated: (i) a *base year* area of softwood plantings which was financed by the state; and (ii) a *scheduled* area in excess of the base year figure, the excess financed by special Federal Government loans. The base year area was constant for each year of the five-year program which commenced in 1966-67.

In late 1972 Federal legislation was passed which extended the Federal Government-State softwood forestry agreement for a further five years. The legislation was made retrospective from July 1971. Financial terms were similar to those set out in the 1967 agreement. The *Softwood Forestry Agreement Act 1976* extended the agreement, but with reduced planting rates, for an additional year from 1 July 1977. In 1978, the financial agreement was renewed for five years from 1 July 1977. The Commonwealth was to contribute to the tending of those plantations which had been established under the agreement during the 11-year period from 1966-67 to 1976-77.

Sawmilling

The next table shows the number of sawmills and their geographical distribution in the State. There has been an overall reduction in recent years, particularly in the Northern part of the State.

**Distribution of Operative Sawmill and Plywood Mill Locations
by Statistical Divisions and Sub-divisions**

<i>Statistical divisions and sub-divisions</i>	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Hobart	13	12	12	11	11	10
Southern	56	43	48	43	50	49
Northern—						
Tamar	52	48	43	39	38	39
North Eastern	25	21	19	19	19	15
Total	77	69	62	58	57	54
Mersey-Lyell—						
North Western	34	30	36	34	41	37
Western	7	7	8	7	7	5
Total	41	37	44	41	48	42
Tasmania	187	161	166	153	166	155

Average Size of Mills

In the year 1963-64 no Tasmanian sawmill exceeded an annual log input of 25 000 cubic metres. A size distribution of mills, classified by volume of log inputs, for recent years is given in the next table:

**Number of Operative Sawmills (Including Plywood Mills)
by Volume of Annual Log Input, Tasmania**

<i>Size classification (cubic metres)</i>	<i>Number of sawmills and plywood mills</i>					
	1975-76(a)	1976-77	1977-78	1978-79	1979-80	1980-81
Up to 500	7	4	2	1	1	—
501- 1 000	7	3	3	1	—	—
1 001- 1 500	8	8	3	2	2	4
1 501- 3 000	19	23	13	15	12	14
3 001- 5 000	26	19	19	22	17	19
5 001-10 000	36	38	22	18	21	23
10 001-15 000	10	7	8	8	6	4
15 001-30 000	10	9	11	13	11	9
30 001-45 000	4	4	2	2	2	5
45 001-60 000	1	1	2	—	2	1
Over 60 000	—	1	—	1	2	3
Total	128	117	85	83	76	82

(a) From 1975-76 includes only mills employing four persons or more; data has been extracted from manufacturing census results.

Mill Production of Timber

As shown previously, logs treated in sawmills and plywood mills during 1980-81 for the production of sawn, peeled, and sliced timber totalled 992 000 m³ while the resulting timber produced totalled only 374 000 m³. The difference between the volume of logs treated and of timber produced is not all waste from the millers' point of view. Admittedly, there is very limited use for sawdust but most offcuts are sold as input to the woodchip and woodpulp industries or docked and sold as firewood.

Chipping, Grinding and Flaking of Wood

Chipping, grinding and flaking of wood is the first process in the production of wood pulp, paper, etc. Up to 1969-70 all chipped, ground and flaked wood was used in local plants making wood pulp, paper, hardboard and particle board. However, from 1970-71 production of woodchips for overseas exports has also been undertaken.

The importance of woodchipping for export is indicated by the following table:

Chipping, Grinding and Flaking of Wood, Tasmania						
Particulars	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Producing locations at 30 June no.	32	31	32	32	30	32
Materials used—						
Logs (a) '000 m ³	2 913	2 751	2 941	3 594	3 370	3 071
Sawmill offcuts '000 m ³	248	261	264	292	309	246
Total '000 m ³	3 161	3 012	3 204	3 885	3 679	3 317
Chipped, ground and flaked wood produced (green weight)—						
For local processing '000 t	832	797	781	871	1 074	938
For export '000 t	2 135	2 041	2 197	2 802	2 354	2 181
Total '000 t	2 967	2 838	2 978	3 672	3 428	3 119

(a) Includes log equivalent of limbwood and billets.

MINING

Introduction

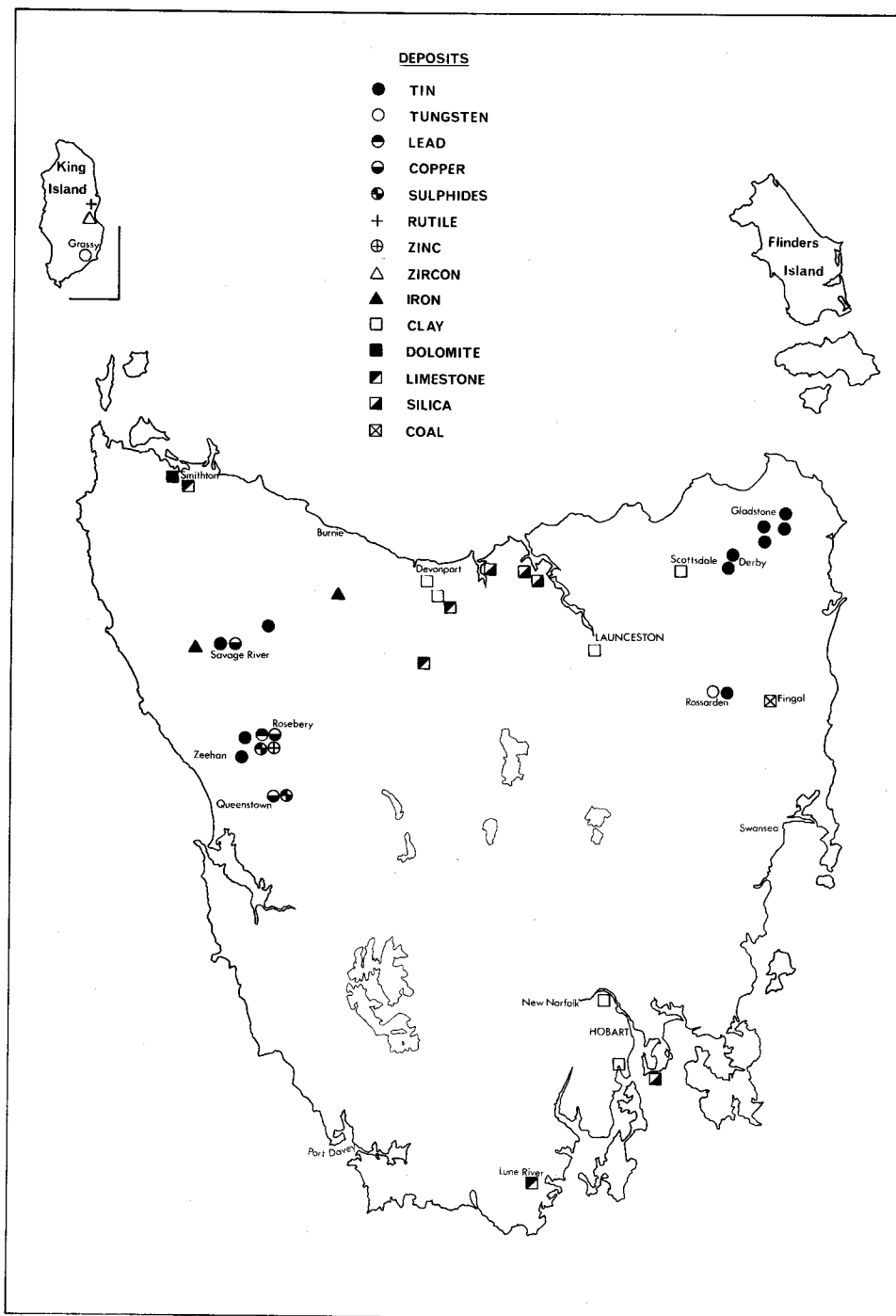
For statistical purposes, mining is taken to cover the operations normally thought of as mining and quarrying (i.e. the removal from underground or surface workings of ores, etc.), the recovery of minerals from ore dumps, tailings, etc. and ore dressing (i.e. concentration and other elementary treatment). It does not include the smelting and/or refining of metallic minerals or the processing of non-metallic minerals (e.g. limestone into cement); these operations are classified as manufacturing.

In the present Tasmanian economy, two important metals will serve to illustrate the distinction between mining and manufacturing: aluminium, produced at Bell Bay on the Tamar; and zinc produced at Risdon near Hobart. In terms of the previous definition, the two metals are considered to be the output of manufacturing and only a small part of their total value is attributable to the mining industry in Tasmania. In the case of aluminium, no Tasmanian ores or concentrates are used and no value accrues to the Tasmanian mining industry. A substantial part of the value of the aluminium is, in fact, accounted for by imported materials. Zinc is produced from both imported and locally-produced concentrates, but only the value of the local concentrates produced at Rosebery is included as contributing to the total value of the Tasmanian mining industry. Prior to the 1977-78 Census of Mining Establishments, the 1969 preliminary edition of ASIC was used to provide a definition of the mining industry. As from 1977-78, the definition of the mining industry has been changed to that specified in the 1978 edition of the ASIC (Cat. No. 1201.0) which treats iron ore pelletising as part of the mining industry and not as part of manufacturing industry.

Historical

Tasmania's first mine opened at Port Arthur in 1834. In that year, it produced 61 tonnes of coal but closed just 10 years later due to the poor quality of the coal and other discoveries elsewhere. Major mineral discoveries were not made until later in the nineteenth century—tin oxide was first discovered near Mt Bischoff in 1871, silver-lead ore was discovered in the Zeehan-Dundas area in 1882 and the 'Iron Blow' copper ore outcrop near Mt Lyell was discovered in 1883. These and later discoveries led to the establishment of mining operations which have had a significant impact on Tasmania's growth. A more detailed historical background to the development of mining in the State is included in the 1976 and earlier editions of the *Year Book* and a 'West Coast Mining Chronology' is included in the 1968 edition.

Location of Principal Mineral Deposits, Tasmania
Metallic, Non-Metallic and Fuel Minerals



Importance of Mining to the State

Mining activity in Tasmania has been subject to frequent and severe fluctuations, mainly as a result of changes in supply and demand. Nevertheless, mining forms an important sector of the Tasmanian economy. The next table lists the major mineral products produced in Tasmania, the locations of the main mines, the assayed content of ores mined during 1980-81 and the assayed content of Tasmanian ores mined as a percentage of total Australian production.

Major Mineral Products: Tasmania-Australia Comparison, 1980-81

Mineral product	Location of main mine(s)	Unit	Assayed content of ores mined		Per cent (a)
			Tasmania	Australia	
Coal (black)	Fingal Valley	tonnes	(b) 304 727	(b) 96 074 000	0.3
Copper	Mt Lyell	tonnes	24 532	246 441	10.0
Gold	Mt Lyell, Rosebery	kg	1 445	16 672	8.7
Iron	Savage River	tonnes	1 503 189	59 064 000	2.5
Lead	Rosebery, Williamsford	tonnes	16 775	381 377	4.4
Silver	Rosebery, Williamsford	kg	58 337	758 800	7.7
Sulphur	Mt Lyell, Rosebery	tonnes	40 490	338 734	12.0
Tin	Renison Bell	tonnes	7 059	12 690	55.6
Tungstic oxide ...	Grassy (King Island)	tonnes	2 960	4 512	65.6
Zinc (c)	Rosebery	tonnes	53 500	581 887	9.2

(a) Tasmanian production as a proportion of Australian production. (At 30 June 1981, Tasmania's population was 2.9 per cent of the total population of Australia.)

(b) Actual production.

(c) Tasmania accounted for approximately 63 per cent of Australia's total refined zinc production in 1980-81. Both local and interstate concentrates are refined in the State.

Major Mining Companies

Normally, the Bureau does not publish information relating to any single enterprise or establishment but only publishes statistical aggregates where these do not directly or indirectly reveal the operations of any single informant. However, inclusion of some description of some of the major mining companies operating in Tasmania is most desirable; therefore, the State Department of Mines has prepared the following brief summaries and accepts responsibility for the information given. (The operations of The Electrolytic Zinc Company of A/asia Ltd (Risdon and Rosebery) and Comalco Aluminium (Bell Bay) Ltd, together with other major Tasmanian manufacturing companies, are summarised in the section 'Industrial Development' which appears in Chapter 14.)

King Island Scheelite (King Island): A member of the Peko-Wallsend Limited group of companies, this Company mines and processes scheelite ore to the concentrate stage from its two underground mines, Bold Head and Dolphin. Completion of a recent \$4 million development project has enabled the Company to produce an artificial scheelite. The 1980 Year Book includes an article on this Company (pp. 217-223).

Mt Lyell Mining and Railway Co. Ltd (Queenstown): This Company, which commenced operations in 1897, is producing copper in the form of concentrates at the rate of about 18 000 tonnes of contained copper per year from 1 600 000 tonnes of ore. The ore is won by underground methods. Due to improved metal prices the Company was able to repay the subsidy of \$2.4 million provided by the Commonwealth Government in 1977-78. An agreement was also entered into with the Tasmanian Government whereby a subsidy of \$604 000 was converted to an interest free loan which is not repayable until 30 June 1985. The Company is at present establishing a major diesel trucking operation in the main decline. Substantial progress has also been made on the installation of two new large ball mills which will replace eleven small mills. (The 1978 Year Book includes a special article titled 'Problems for the Mt Lyell Mining and Railway Co. Ltd', pp. 247-249.)

Renison Ltd (Rosebery): The present mining and concentrating plant was commissioned in December 1966. It has grown out of early mining operations to become the

largest tin mine in Australia. It has the further distinction of being the world's largest producer of tin metal in concentrates from a hard rock underground mining operation. A concentrate leach plant was completed in August 1977. This plant treats both high grade gravity and low grade flotation concentrates by sulphuric acid leach to produce a single product containing about 50 per cent tin. Smelting trials were conducted in Japan in 1977 with a view to establishing an electric tin smelter in Tasmania to treat tin concentrates from the leach plant. Current production rates are of the order of 11 000 tonnes of tin concentrate, containing 5 500 tonnes of tin, from 600 000 tonnes of ore. A two stage development program now under way will increase capacity for ore treatment to 850 000 tonnes per annum. At the end of 1979, Stage 1 of the concentrator was progressing well. Detailed design of Stage 2 was well advanced and the rod mill foundations were almost completed. (The 1979 *Year Book* includes a special article on the Company, pp. 216-223.)

Savage River Mines (Pickands Mather and Co. International Managing Agent) (Savage River): Established at a cost of \$80m, the Port Latta iron ore pelletising plant commenced operations in 1968. Annual production was increased during 1971 to more than 2.5m tonnes of high-grade iron ore pellets. The entire production is sold to Japanese steel mills. In future it is hoped to develop a new open cut mine which will be operated concurrently with the present mine.

Statistics of Mineral Production

Source of Data

Statistics relating to quantities of minerals produced (including assayed metallic content) are, in the main, obtained from the State Department of Mines and are supplemented, where necessary, with data obtained from the annual census of mines and quarries conducted by the Australian Bureau of Statistics, and from the Federal Bureau of Mineral Resources.

Other details of the mining industry such as employment, value of output, and costs of production, etc. are obtained from the annual census of mines and quarries, conducted by the Bureau. This census was first conducted in 1952 and the information obtained from each census was basically the same until 1968. As from 1968-69 the mining sector census was standardised in accordance with the concepts employed in the integrated economic censuses (see 'Integrated Economic Censuses' in Chapter 19 for a comparison between mining and other industries included in the integrated censuses).

Tasmania's larger mining operations, in particular metal mining, are located in the west of the State and are concentrated in an area from Queenstown to Savage River. A number of tin mines operate in the north-east of Tasmania but their combined output no longer compares with either former activity in that area or current operations in the west.

Metallic Minerals

The table that follows shows the quantity of metallic minerals produced in Tasmania for a six-year period:

Metallic Minerals: Production, Tasmania

Mineral	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Tonnes						
Chromite concentrate	—	—	301	1 285	1 862	977
Copper concentrate	83 255	70 237	70 668	77 039	64 791	80 802
Copper-tin concentrate	2 896	2 610	1 806	1 980	2 239	1 916
Iron—Concentrate	2 109 363	2 315 196	1 869 607	2 271 990	2 191 979	2 175 383
Oxide	9 831	14 700	13 793	15 525	15 946	20 600
Lead concentrate	13 341	13 785	17 710	18 226	18 629	12 900
Lead-copper concentrate	19 480	25 709	27 760	24 719	24 185	22 328
Molybdenum concentrate	—	—	—	—	66	54
Pyrite concentrate	212 931	227 242	252 469	110 942	15 720	—

continued next page

Metallic Minerals: Production, Tasmania—continued

<i>Mineral</i>	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
<i>Tonnes</i>						
Rutile concentrate	6 994	3 886	—	—	—	—
Tin concentrate	12 889	15 035	14 677	14 127	13 552	14 498
Tungsten concentrates—						
Scheelite concentrate	2 360	3 180	3 391	3 123	3 629	3 536
Wolfram concentrate	274	215	174	193	177	267
Zinc concentrate	123 944	126 271	142 568	131 096	131 645	94 636
Zircon concentrate	7 953	3 722	—	—	—	—
<i>Kilograms</i>						
Gold (not in concentrates)	1	1	1	1	1	1

Assayed Content: In the following table, the various concentrates have been grouped to show their content in terms of individual metals. The contents stated are as determined by assay and include all pay metals and metals which are a refiner's prize; totals compiled on this basis contain no allowances for losses in smelting and refining and therefore, in general, exceed the quantities actually recoverable. The table refers exclusively to minerals mined in Tasmania.

Assayed Contents of Metallic Minerals Produced, Tasmania

<i>Mineral</i>	1975-76	1976-77	1977-78	1978-89	1979-80	1980-81
<i>Cadium (Tonnes)</i>						
Zinc concentrate	172	177	200	177	173	126
<i>Chromic Oxide (Tonnes)</i>						
Chromite concentrate	—	—	168	603	1 040	567
<i>Copper (Tonnes)</i>						
Copper concentrate	21 298	18 444	18 548	20 174	16 948	21 147
Copper-tin concentrate	628	535	390	457	480	401
Lead concentrate	63	60	89	90	61	49
Lead-copper concentrate	2 656	3 328	3 599	3 343	3 077	2 645
Zinc concentrate	416	443	398	407	394	290
Total	25 061	22 809	23 024	24 471	20 960	24 532
<i>Gold (Kilograms)</i>						
Copper concentrate	434	367	400	460	400	467
Lead concentrate	30	27	39	61	47	37
Lead-copper concentrate	986	1 133	1 327	1 038	1 049	809
Zinc concentrate	148	164	167	204	169	132
Other sources	1	1	1	1	1	—
Total	1 598	1 691	1 934	1 763	1 666	1 445
<i>Iron (Tonnes)</i>						
Iron concentrate	1 463 044	1 601 011	1 291 899	1 569 946	1 514 656	1 503 189
<i>Lead (Tonnes)</i>						
Lead concentrate	8 919	9 079	11 942	11 726	11 763	7 734
Lead-copper concentrate	4 823	6 215	6 882	5 155	5 562	6 020
Zinc concentrate	5 800	5 118	4 763	4 291	3 887	3 021
Total	19 542	20 412	23 587	21 172	21 212	16 775

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Assayed Contents of Metallic Minerals Produced, Tasmania—continued

Mineral	1975-76	1976-77	1977-78	1978-89	1979-80	1980-81
<i>Manganese (Tonnes)</i>						
Zinc concentrate	316	342	613	261	266	193
<i>Molybdenum (Kilograms)</i>						
Molybdenum concentrate	—	—	—	—	25 209	19 863
<i>Silver (Kilograms)</i>						
Copper concentrate	3 983	2 973	2 636	2 887	2 863	3 875
Lead concentrate	11 005	11 874	15 401	15 903	13 579	8 992
Lead-copper concentrate	42 780	49 533	56 430	49 995	43 765	37 468
Zinc concentrate	17 745	14 667	12 929	12 133	10 439	8 002
Total	75 515	79 047	87 397	80 917	70 645	58 337
<i>Sulphur (Tonnes)</i>						
Lead concentrate	2 370	2 507	3 153	3 437	3 511	2 540
Lead-copper concentrate	5 527	7 674	8 172	7 558	7 193	6 357
Pyrite concentrate	101 156	109 671	114 690	52 986	7 637	—
Zinc concentrate	40 284	41 125	45 505	42 830	43 362	31 593
Total	149 337	160 977	171 520	106 811	61 703	40 490
<i>Tin (Tonnes)</i>						
Copper-tin concentrate	76	72	45	47	45	29
Tin concentrate	5 794	6 760	6 947	6 913	6 755	7 030
Total	5 870	6 832	6 992	6 960	6 800	7 059
<i>Titanium Oxide (Tonnes)</i>						
Rutile concentrate	6 710	3 692	—	—	—	—
Zircon concentrate	23	11	—	—	—	—
Total	6 733	3 703	—	—	—	—
<i>Tungstic Oxide (Tonnes)</i>						
Scheelite concentrate	1 670	2 398	2 465	2 280	2 716	2 771
Wolfram concentrate	206	159	124	139	127	189
Total	1 876	2 557	2 589	2 419	2 843	2 960
<i>Zinc (Tonnes)</i>						
Lead concentrate	1 348	1 560	1 885	2 099	2 498	1 893
Lead-copper concentrate	1 942	2 490	2 865	2 546	2 984	2 763
Zinc concentrate	64 028	65 917	75 185	68 429	67 765	48 844
Total	67 318	69 967	79 935	73 074	73 247	53 500
<i>Zircon (Tonnes)</i>						
Rutile concentrate	56	30	—	—	—	—
Zircon concentrate	5 259	2 456	—	—	—	—
Total	5 315	2 486	—	—	—	—

Fuel Minerals (Coal)

The only fuel mineral mined in Tasmania is coal. There are known deposits of coal throughout much of Tasmania but the most important are those located in the Fingal Valley in the north-east. The Fingal Valley deposits were discovered in 1866.

In 1890 Tasmania produced 55 000 tonnes of coal and production continued to rise until a peak of over 300 000 tonnes was reached in 1959-60. Since then there has been a marked decline due to competition from fuel oil, particularly in manufacturing industries. Recently the downward trend in production has been reversed with major Tasmanian manufacturers switching back to coal from oil as their fuel for operations. Production details for recent years (in tonnes) are as follows: 1975-76, 176 352; 1976-77, 193 927; 1977-78, 195 291; 1978-79, 252 800; 1979-80, 279 197; and 1980-81, 304 727 (all production is of black bituminous coal).

Non-Metallic (Excluding Fuel) Minerals

The quarrying of limestone is the earliest recorded activity in the field of non-metallic mineral mining in the State, burnt lime being sought as a base for building mortar. Production of this non-metallic mineral has gradually increased to meet a rising demand in various industrial processes. Large exports of limestone were made in the period 1918-1947, when the BHP Co. Ltd operated quarries at Melrose on the North-West Coast.

The next table shows the Tasmanian production of non-metallic minerals for a six-year period:

**Non-Metallic (Excluding Fuel) Minerals Production, Tasmania
(Tonnes)**

<i>Mineral</i>	<i>1975-76</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Clays and shales—						
Brick	156 254	153 306	137 593	136 947	143 784	162 830
Other	64 447	49 704	41 684	54 406	55 475	50 970
Dolomite	9 259	7 734	11 232	15 018	17 464	9 872
Limestone (a)	548 969	667 090	713 589	757 976	722 131	744 077
Peat Moss	535	330	372	345	880	702
Pebbles	1 771	1 189	1 566	1 418	1 762	2 077
Silica (b)	34 708	47 418	56 640	59 420	93 831	37 329

(a) Excludes quantities used directly as building or road construction material.

(b) For glass, chemical, etc. manufacturing.

Construction Materials

In addition to the types of mining and quarrying previously described there is the quarrying of construction materials (for buildings, roads, etc.) such as crushed and broken stone, gravel and sand. This type of activity also is taken into account when placing a value on the output from mines and quarries, measuring their level of employment, etc.

Census of Mining Establishments

Annual censuses of mines were conducted by the Bureau from 1952; the last 'old-style' mining census covered the calendar year 1968. For 1968-69 simultaneous integrated economic censuses were undertaken in respect of mining and four other sectors (manufacturing; wholesale trade; retail trade and electricity and gas production and distribution). In the section 'Integrated Economic Censuses' in Chapter 19, the results of these censuses are presented so that the economic significance of mining can be compared with that of other sectors included in the censuses. Definitions of concepts and terms used are also included in that section.

Mining Establishments—Summary of Operations

The tables that follow give results for the mining censuses from 1975-76 to 1980-81:

**Census of Mining Establishments
Summary of Operations by Industry Sub-division, Tasmania**

<i>Particulars</i>	<i>1975-76</i>	<i>1976-77</i>	<i>1977-78 (a)</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
<i>Metallic Minerals</i>						
Establishments (b) .....no.	18	19	16	18	23	30
Persons employed (c)—						
Males .....no.	3 723	3 596	3 679	3 735	3 883	4 035
Females .....no.	199	184	177	183	186	202
Total .....no.	3 922	3 780	3 856	3 918	4 069	4 237
Wages and salaries .....\$'000	44 430	48 309	52 759	58 712	70 178	78 574
Turnover .....\$'000	124 725	174 523	233 950	277 224	340 872	336 544
Stocks—						
Opening .....\$'000	17 174	22 760	23 881	24 485	26 496	40 183
Closing .....\$'000	22 762	19 416	24 404	26 271	40 101	39 932
Purchases, etc. (d) .....\$'000	54 545	61 341	83 442	106 647	123 234	158 780
Value added .....\$'000	75 768	109 838	151 031	172 363	231 243	177 513
Rent, leasing expenses .....\$'000	997	1 071	1 330	1 464	2 199	2 113
Fixed capital expenditure (e) .....\$'000	16 937	12 100	16 163	18 687	28 927	35 487
<i>Coal</i>						
Establishments (f) .....no.	1	1	1	1	1	1
<i>Construction Materials</i>						
Establishments .....no.	26	28	33	32	34	29
Persons employed (c)—						
Males .....no.	171	180	191	160	221	187
Females .....no.	7	5	6	14	20	20
Total .....no.	178	185	197	174	241	207
Wages and salaries .....\$'000	1 392	1 607	2 150	1 834	3 099	2 850
Turnover .....\$'000	6 851	7 813	10 173	10 522	10 522	14 912
Stocks—						
Opening .....\$'000	419	610	609	525	1 472	1 955
Closing .....\$'000	519	524	745	1 174	1 996	1 608
Purchases, etc. (d) .....\$'000	3 771	3 175	3 849	5 414	6 852	7 583
Value added .....\$'000	3 181	4 552	6 459	5 757	9 358	6 982
Rent, leasing expenses .....\$'000	246	218	227	171	207	225
Fixed capital expenditure (e) .....\$'000	953	793	3 896	2 308	1 042	626
<i>Other Non-Metallic Minerals</i>						
Establishments (f) .....no.	12	15	14	15	11	10
<i>Total Mining</i>						
Establishments (b) .....no.	57	63	64	66	69	70
Persons employed (c)—						
Males .....no.	4 039	3 939	4 056	4 114	4 312	4 439
Females .....no.	209	194	185	203	215	233
Total .....no.	4 248	4 133	4 241	4 317	4 527	4 672
Wages and salaries .....\$'000	47 197	51 538	57 136	63 122	75 878	84 699
Turnover .....\$'000	134 446	187 581	251 117	296 465	366 763	363 053
Stocks—						
Opening .....\$'000	18 020	23 483	24 671	25 459	28 529	42 818
Closing\$'000	23 394	20 086	25 397	28 091	42 785	42 640
Purchases, etc. (d)\$'000	59 213	65 565	89 338	115 135	133 624	170 172

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Census of Mining Establishments
Summary of Operations by Industry Sub-division, Tasmania—continued

Particulars	1975-76	1976-77	1977-78 (a)	1978-79	1979-80	1980-81
<i>Total Mining</i>						
Value added	\$'000 80 607	118 619	162 505	183 963	247 396	192 703
Rent,leasing expenses	\$'000 1 351	1 452	1 762	1 937	2 711	2 733
Fixed capital expenditure (e)	\$'000 17 972	13 102	20 437	21 689	31 020	39 931

(a) Based on the 1978 edition of ASIC. Data for earlier years are based on the 1969 ASIC (preliminary). The main change from the 1969 to the 1978 ASIC was the transfer of iron-ore pelletising plants from the 'manufacturing' industry division to 'mining'.

(b) Excludes small tin producing establishments with a value of sales of less than \$20 000.

(c) At last pay-period in June; includes working proprietors.

(d) Purchases, transfers in and selected expenses.

(e) Outlay on fixed tangible assets less disposals.

(f) Other data not available for separate publication but included in 'Total Mining'.

Mineral Exploration (Other than for Petroleum)

The statistics in the following tables relating to exploration for minerals other than petroleum are derived from the annual census of mineral exploration.

'Mineral exploration' consists of the search for mineral deposits, the appraisal of newly-found deposits, and the further appraisal of known deposits (including those being worked) by geological, geophysical, geochemical and other methods (including drilling). Exploration for water is excluded. The construction of shafts and adits primarily for exploration purposes is included.

The data obtained in the mineral exploration census are divided into the following categories:

Exploration on Production Leases: Relates to exploration carried out on a production lease currently producing, or under development for production of, minerals other than petroleum. Mines included in this section of the mineral exploration census correspond closely to those in the annual census of mining and quarrying with the exception of a limited number of itinerant prospectors and small mines excluded from the collection.

Exploration on Other Areas: Relates to: (i) exploration carried out on areas covered by exploration licences issued by the Department of Mines for minerals other than petroleum; and (ii) exploration by private enterprise for minerals which is not directly connected with areas under lease or licence, including general surveys, aerial surveys, report writing, map preparation and other off-site activities not directly attributable to particular lease or licence areas.

The following table shows expenditure details relating to mineral exploration (other than for petroleum) in Tasmania for recent years:

Mineral Exploration Other Than for Petroleum: Expenditure, Tasmania
(\$'000)

Year	Wages and salaries paid	Stores, materials, fuels, etc. purchased	Payments to contractors (a)	Other current expenditure (b)	Net capital expenditure (c)	Total
<i>Private Exploration on Production Leases</i>						
1975-76 ..	363	86	501	60	21	1 031
1976-77 ..	338	131	712	274	22	1 477
1977-78 ..	303	187	965	218	57	1 730
1978-79 ..	435	168	1 499	198	30	2 330
1979-80 ..	397	126	1 463	256	53	2 294
1980-81 ..	974	398	2 960	305	179	4 816

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Mineral Exploration Other Than for Petroleum: Expenditure, Tasmania
(\$'000)—continued

<i>Year</i>	<i>Wages and salaries paid</i>	<i>Stores, materials, fuels, etc. purchased</i>	<i>Payments to contractors (a)</i>	<i>Other current expenditure (b)</i>	<i>Net capital expenditure (c)</i>	<i>Total</i>
<i>Other Private Exploration</i>						
1975-76 ..	850	347	1 188	637	70	3 092
1976-77 ..	811	325	1 024	598	79	2 838
1977-78 ..	1 345	566	2 387	1 073	311	5 681
1978-79 ..	1 610	559	2 936	1 732	145	6 983
1979-80 ..	2 250	937	4 882	2 138	199	10 405
1980-81 ..	3 296	1 227	5 541	4 208	644	14 916
<i>Total Private Exploration</i>						
1975-76 ..	1 213	433	1 690	696	92	4 124
1976-77 ..	1 149	456	1 736	872	102	4 315
1977-78 ..	1 648	753	3 352	1 291	367	7 411
1978-79 ..	2 045	727	4 436	1 929	175	9 313
1979-80 ..	2 647	1 063	6 345	2 394	252	12 699
1980-81 ..	4 270	1 625	8 501	4 513	823	19 732
<i>Total Government Exploration (d)</i>						
1975-76 ..	366	50	—	77	31	523
1976-77 ..	455	50	—	50	21	576
1977-78 ..	502	52	—	58	14	626
1978-79 ..	544	65	—	65	44	717
1979-80 ..	628	66	—	114	203	1 011
1980-81 ..	498	66	—	80	211	854
<i>Total Private and Government Exploration</i>						
1975-76 ..	1 579	483	1 690	773	122	4 647
1976-77 ..	1 604	506	1 736	922	123	4 891
1977-78 ..	2 150	805	3 352	1 349	381	8 037
1978-79 ..	2 589	792	4 436	1 994	219	10 030
1979-80 ..	3 274	1 129	6 345	2 508	455	13 710
1980-81 ..	4 768	1 691	8 501	4 593	1 034	20 586

(a) Amounts paid to contractors, geological consultants, etc., employed to carry out exploration activities.

(b) Other current exploration expenditure such as maintenance expenses, map preparation, aerial surveys, and rent and fees paid to governments for mineral tenements.

(c) Net capital expenditure is defined as expenditure on fixed tangible assets less disposals.

(d) Exploration by Tasmanian Department of Mines.

The next table shows the total drill hole depths drilled, sunk or driven in mineral exploration (other than for petroleum) in recent years:

Mineral Exploration Other Than for Petroleum: Metres Drilled, Sunk or Driven, Tasmania

<i>Year</i>	<i>Drilling</i>		
	<i>Core (a)</i>	<i>Non-core (b)</i>	<i>Total</i>
<i>Private Exploration on Production Leases</i>			
1975-76	16 419	494	16 913
1976-77	19 441	198	19 639
1977-78	25 868	197	26 065
1978-79	32 771	—	32 771
1979-80	32 082	2 667	34 749
1980-81	57 947	1 023	58 970

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Mineral Exploration Other Than for Petroleum: Metres Drilled, Sunk or Driven, Tasmania—continued

Year	Drilling		
	Core (a)	Non-core (b)	Total
<i>Other Private Exploration</i>			
1975-76	21 514	6 291	27 805
1976-77	19 005	2 123	21 128
1977-78	25 779	3 645	29 424
1978-79	30 048	3 000	33 048
1979-80	38 735	2 603	41 338
1980-81	45 181	9 124	54 305
<i>Total Private Explorations</i>			
1975-76	37 933	6 785	44 718
1976-77	38 446	2 321	40 767
1977-78	51 647	3 842	55 489
1978-79	62 819	3 000	65 819
1979-80	70 817	5 270	76 087
1980-81	103 128	10 147	113 275
<i>Total Government Exploration (c)</i>			
1975-76	2 572	—	2 572
1976-77	3 835	—	3 835
1977-78	5 134	—	5 134
1978-79	5 607	—	5 607
1979-80	10 460	—	10 460
1980-81	11 005	—	11 005
<i>Total Private and Government Exploration</i>			
1975-76	40 505	6 785	47 290
1976-77	42 281	2 321	44 602
1977-78	56 781	3 842	60 623
1978-79	68 426	3 000	71 426
1979-80	81 277	5 270	86 547
1980-81	114 133	10 147	124 280

(a) Diamond drilling, or any kind of drilling in which cores are taken.

(b) Alluvial, percussion and other drilling in which cores are not taken.

(c) Exploration by Tasmanian Department of Mines.

FISHERIES**General**

The Tasmanian saltwater fishing industry involves 1 678 licensed fishermen and crew who operate 781 licensed fishing vessels from the State. The species which comprise the annual catch are not only scale fish but also include elasmobranchs (sharks), molluscs (scallops, oysters, abalone) and crustaceans (southern rock lobster).

In 1980-81 the catch of fish, molluscs, crustaceans and fresh water species totalled 11 390 tonnes which was an increase of 6 per cent on the 1979-80 figure of 10 760 tonnes but still well below the record catch for 1973-74 when 14 828 tonnes were harvested. The high catch for 1973-74 was mainly due to the establishment of a fish protein factory at Triabunna which ceased operations in mid-1974.

The Fisheries Development Authority controls saltwater fisheries and the Inland Fisheries Commission controls freshwater fisheries. Most freshwater fish are caught for sport but two species (eels and whitebait) have been caught for commercial purposes.

Commercial fishing for whitebait began in 1941 and reached a peak in 1947 when over 450 tonnes were caught. Since 1950 the catch has gradually declined to such a degree that no catch has been recorded since 1976-77.

Rainbow trout are raised commercially on trout farms at Bridport and Russell Falls. There are rainbow and brown trout in Tasmanian lakes and rivers (introduced as exotic species) but these may only be fished for by licensed sportsmen and may not be sold.

A commercial freshwater fishery for the short-finned eel was established in 1965. Production in 1980-81 was 27.0 tonnes which was 29 percent below the 37.9 tonnes recorded for 1979-80.

Fish Varieties and Species

The following table lists the main Tasmanian commercial fish varieties and species:

Main Commercial Fish Varieties and Species, Tasmania			
Variety	Species	Variety	Species
Eel	<i>Anguilla australis</i>	Tuna	<i>Thunnus</i>
Whitebait	<i>Lovettia sealii</i>		<i>maccoyii</i>
Rainbow trout	<i>Salmo gairdnerii</i>		<i>T. alalunga</i>
Flounder	Fam. <i>Pleuronectidae</i>		<i>Katsuwonus</i>
Cod	<i>Pseudophycis</i>		<i>pelamis</i>
	<i>barbatus</i>	Mackerel	<i>Auxis thazard</i>
		Snoek (barracouta)	<i>Thyrstites atun</i>
Mullet	<i>Mugil cephalus</i>	Garfish	<i>Hyporhamphus</i>
	<i>Aldrichetta</i>		<i>melanochir</i>
	<i>forsteri</i>	Southern rock	
Trevalla, deep sea	<i>Hyperoglyphe</i>	lobster	<i>Jasus novaehollan-</i>
	<i>antarctica</i>		<i>diae</i>
Warehou	<i>Seriola brama</i>	Oyster	<i>Ostrea angasi</i>
Salmon	<i>Arripis trutta</i>		<i>Crassostrea gigas</i>
Morwong	<i>Nemadactylus</i>		
	<i>macropterus</i>	Scallop	<i>Pecten</i>
Trumpeter	<i>Latris lineatus</i>		<i>meridionalis</i>
	<i>Latridopsis</i>		<i>Equichlamys</i>
	<i>forsteri</i>		<i>bifrons</i>
			<i>Mimachlamys</i>
			<i>asperimus</i>
Flathead	<i>Platycephalus</i>	Abalone	<i>Notohalotis ruber</i>
	<i>richardsoni</i>		<i>Schismotis</i>
	<i>Platycephalus</i>		<i>laevigata</i>
	<i>speculator</i>		
	<i>Platycephalus</i>		
	<i>bassensis</i>		
	<i>Leviprora</i>		
	<i>laevigata</i>		
Shark	<i>Mustelus</i>		
	<i>antarcticus</i>		
	<i>Galeorhinus</i>		
	<i>australis</i>		

Fisheries Statistics

Source of Data and Method of Presentation

Statistics presented in this section have been supplied principally by the Tasmanian Fisheries Development Authority. In the preparation of fisheries production statistics, the quantities are generally in terms of the form in which the catch is taken from the water. For example, the statistics of fish production are in terms of 'estimated live weight' which is calculated from landed weights by using conversion factors for the various species. These conversion factors allow for the fact that the quantities of fish reported are frequently in a gutted, headed and gutted, or otherwise reduced condition. Crustaceans are reported on a 'whole weight' basis and molluscs (edible) on a 'gross (in-shell) weight' basis.

The actual edible yield varies depending on types of fish and methods of preparation. Barracouta yield about 51 per cent of live weight when filleted, and shark about 60 per cent when headed and gutted. The edible flesh in molluscs represents only a small portion of the in-shell weight. Approximately 1 kg of scallop flesh equals 4.5 kg in-shell weight and 1 kg of abalone flesh equals 2.25 kg in-shell weight.

The catch is generally defined as that landed in Tasmanian ports, regardless of whether it is caught in Tasmanian waters or not, or whether it is caught by Tasmanian fishermen or not. Shark, southern rock lobster and other fish taken by Victorian based fishermen in Tasmanian waters, but landed in Victoria, are included in the Victorian catch and excluded from Tasmanian figures on the basis that the catch influences the Victorian rather than the Tasmanian economy.

Details of production refer only to recorded commercial production. In view of the importance of amateur fishermen in certain types of fishing, details shown cannot be taken as representing the whole catch. In addition, it is likely that the figures shown understate, to some extent, the full commercial catch since no information is available on fish taken for sale by persons not licensed as professional fishermen.

Production

Fish: Production by Type, Tasmania
(Estimated Live Weight, Tonnes) (a)

Type	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Australian salmon	473	573	611	451	283	200
Barracouta (snoek)	143	37	194	38	7	2
Cod	1	2	2	3	2	2
Flathead	32	29	112	186	62	129
Flounder	5	3	1	—	7	8
Garfish	35	28	20	21	39	49
Morwong	35	59	20	43	10	118
Mullet	5	4	6	3	4	5
Shark	1 238	1 130	1 710	1 490	1 210	1 288
Trevalla, deep-sea	}	59	64	109	142	220
Warehou						
Trumpeter						
Tuna						
Other (b)	189	203	320	199	388	406
Total	2 229	2 153	3 105	2 605	2 188	2 527

(a) Estimated live weights are calculated from landed weights by conversion factors since quantities of fish are frequently reported in a gutted, headed and gutted, or otherwise reduced condition (e.g. barracouta and shark).

(b) Includes bait and freshwater species.

The fish types shown in the above table appear without any further description to identify the particular species but a specification of the more common species for each type is given earlier in this section. The figures, derived from fish buyers' transactions, do not reflect the actual production from Tasmanian waters due to: (i) landing at Tasmanian ports of fish caught in interstate waters; (ii) landing at interstate ports of fish caught in Tasmanian waters; and (iii) direct sales by fishermen.

Crustaceans and Molluscs

In terms of value, the principal items in the Tasmanian catch are abalone and southern rock lobster (crayfish). The next table shows details of production of crustaceans and molluscs:

Crustaceans and Molluscs: Production by Type, Tasmania

Type	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
<i>Crustaceans (Whole weight, tonnes)</i>						
Southern rock lobster	1 229	1 177	1 192	1 305	1 340	1 553
<i>Molluscs (In-shell weight, tonnes)</i>						
Abalone	2 429	2 368	2 525	3 100	3 214	3 743
Scallops	690	498	400	1 077	3 829	3 359
Oysters	94	149	138	116	105	190
Mussels	—	—	1	9	19	11
Squid	1	6	2	72	63	10
Octopus	—	—	2	5	3	2
Total	3 213	3 021	3 068	4 380	7 233	7 315

Development of the Tasmanian abalone fishery dates from 1964 when divers commenced taking abalone for export. The catch increased from 33 tonnes in 1963-64 to 3 488 tonnes in 1970-71 but then fell away before recovering in the late 1970's. In 1980-81 a record catch of 3 743 tonnes was harvested.

Comparison with Other States

Rock Lobster: Total production of rock lobster in Australia during 1980-81 was 14 794 tonnes of which Tasmania produced ten per cent (1 553 tonnes). The main producing states were Western Australia with 9 956 tonnes (67 per cent) and South Australia with 2 810 tonnes (20 per cent).

Abalone: In 1980-81 Tasmania remained the leading producer of abalone in Australia contributing 68 per cent of the total Australian production of 5 505 tonnes. The Tasmanian catch for 1980-81 is 16 per cent higher than the previous year's figure of 3 214 tonnes.

Scallops: For many years Tasmania was the only state in Australia with a commercial scallop fishery; in 1955-56 Tasmania was joined by Queensland, but continued to retain its dominant position in the industry. However, in 1963 Tasmanian fishermen started a Victorian fishery in beds known to exist in Port Phillip Bay and the new site in its first year (1963-64) produced more than twice the quantity of the Tasmanian fishery. No scallops were dredged from Tasmanian waters in 1970-71, and only 52 tonnes in 1971-72. Following the discovery of new beds in Bass Strait the Tasmanian catch increased to 1 261 tonnes in 1974-75, but dropped significantly in the period from 1975-76 to 1977-78 before increasing to over 3 000 tonnes in 1979-80 and 1980-81.

Fish Landed at Fishing Ports

The table that follows shows the proportion of fish landed at Tasmanian fishing ports. The information relates to port of landing only, and not to the area in which the catch was made.

Proportion of Fish (Live Weight) Landed at Each Port, Tasmania
(Per Cent)

Port	1979-80	1980-81	Port	1979-80	1980-81
Derwent & Channel—			Bass Strait & Islands—		
Dover	1.9	4.0	Bridport	4.7	2.7
Hobart	6.2	9.3	Currie	2.2	0.4
Kettering	5.1	4.4	Lady Barron	7.9	5.2
Margate	5.0	4.3	Devonport (a)	22.8	17.6
			Smithton	2.4	0.2
			Stanley	18.8	20.8
			'Tamar' (b)	0.2	3.2
			Wynyard	2.2	3.3
Total	18.2	22.0	Total	61.2	53.3

continued next page

**Proportion of Fish (Live Weight) Landed at Each Port, Tasmania
(Per Cent)—continued**

<i>Port</i>	<i>1979-80</i>	<i>1980-81</i>	<i>Port</i>	<i>1979-80</i>	<i>1980-81</i>
East Coast and Peninsula—			West Coast—		
Bicheno	2.8	2.8	Strahan	10.9	6.6
Coles Bay	0.5	0.5			
St Helens	1.4	2.0			
Triabunna	0.6	6.5			
Dunalley	1.2	1.4			
Port Arthur	3.2	3.6			
Nubenna	0.1	1.2			
Total	9.8	18.1	Total Tasmania	100.0	100.0

(a) Includes Port Sorrell.

(b) Launceston, Beauty Point and other Tamar ports.

**Proportion of Fish (Live Weight) Landed in Each Month, Tasmania
(Per Cent)**

<i>Month</i>	<i>1979-80</i>	<i>1980-81</i>	<i>Month</i>	<i>1979-80</i>	<i>1980-81</i>
July	4.7	4.9	January	15.9	11.2
August	5.7	8.8	February	16.5	8.5
September	3.8	1.9	March	9.9	7.4
October	4.6	8.3	April	6.2	8.4
November	6.8	11.1	May	13.4	14.1
December	6.3	8.9	June	6.2	6.8

Value of Production—Fishing

The table that follows gives details of gross values of fishery products. (For definition of 'gross value' see later section 'Value of Production'.)

**Fisheries: Gross Value of Production, Tasmania
(\$'000)**

<i>Particulars</i>	<i>1975-76</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Fish (a)	1 108	1 621	2 438	2 482	2 994	3 654
Crustaceans (b)	3 670	4 702	5 019	5 904	6 938	8 385
Molluscs	3 733	5 339	5 152	6 250	10 531	14 476
Total	8 511	11 662	12 609	14 636	20 463	26 514

(a) Includes value of seaweed harvested for production of alginate.

(b) Mainly southern rock lobster but includes crabs.

Marketing

In general terms, it can be said that production of fish, crustaceans and molluscs from the Tasmanian fisheries far exceeds the demand generated by the relatively small State population. It follows, therefore, that the industry is largely dependent on its ability to find export markets, both interstate and overseas, and this raises the problem of preserving a perishable product. The problem of preservation has three aspects: (i) at sea; (ii) on shore; and (iii) in transit to market. Of the 781 registered fishing boats in 1980, 245 boats (i.e. 31 per cent) had refrigeration plants of various kinds. In addition, some catches, e.g. southern rock lobster, can be kept alive in boat wells. Cold storage facilities ashore serve to hold the catch before its despatch to interstate and overseas markets while actual

exports are carried by air, by refrigerated trailer and container, and in the refrigeration chambers of conventional ships. The following table shows the value of exports of fishery products. The fact that Tasmania has an exportable surplus, yet nevertheless imports some fishery products, is chiefly due to differences in type; the imported varieties include canned sardines, anchovies, oysters, crabs, etc. together with frozen, salted or smoked varieties mainly of European, New Zealand, Canadian or USA origin.

Fishery Products: Value of Exports, Tasmania
(£'000)

<i>Particulars</i>	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Fish (a)—Overseas	21	46	50	81	215	15
Interstate	422	583	607	587	r 441	529
Southern rock lobster—						
Overseas	339	373	676	774	1 548	1 436
Interstate	1 440	2 127	1 780	3 853	r 3 267	4 156
Molluscs—Overseas	2 391	2 640	4 385	7 496	13 733	18 792
Interstate	325	853	136	195	189	303
All types—Overseas	2 751	3 058	5 111	8 351	15 497	20 243
Interstate	2 187	3 563	2 523	4 635	r 3 897	4 988
Total	4 939	6 621	7 634	12 986	r 19 394	25 231

(a) Includes fresh and frozen fish and fish preserved in tins.

Tasmanian Fisheries Development Authority

General

The Tasmanian Fisheries Development Authority was established on 1 December 1977 under the provisions of the *Fisheries Development Act 1977*. The Authority has the following objectives:

- (i) the promotion and development of the fishing industry that is carried on in or from Tasmania.
- (ii) the maintenance of proper standards with respect to fish and fish products intended for consumption in, or for export from, Tasmania both as to quality and as to the methods of handling, processing, storage, packaging and transport.
- (iii) the undertaking of research, exploratory and experimental work related to the management of the living resources in the waters around Tasmania and to the fishing industry of Tasmania.

The management of Tasmanian fisheries in tidal waters is the responsibility of the Minister for Primary Industry under the *Fisheries Act 1959*. Prior to December 1977 that Act was administered by the Fisheries Division of the Department of Agriculture. Administrative responsibility is now vested in the Tasmanian Fisheries Development Authority.

Resource Research

Research activities are centred at the Authority's laboratory at Taroona and on the research vessel 'Challenger'. In addition specifically chartered vessels also collect information generally whilst engaged in surveys or special development projects.

Since the establishment of the Authority research has concentrated on developing aquaculture techniques and achieving a better understanding of demersal fish resources. Techniques in hatching and culturing of pacific and native oysters, commercial and queen scallops, mussels and abalone have been investigated. The principal projects are supported by work in the field of marine chemistry, histology, data analysis and environmental monitoring.

Fisheries Development

A major task of the Authority has been to assist diversification of the State's fishing industry and expand the utilisation of undeveloped or partially developed marine resources. In the catching sector the principal methods used have been surveys and feasibility fishing and extension activities in fishing gear.

Feasibility fishing is a special form of exploratory fishing authorised by the Commonwealth and State governments to accelerate an understanding of the undeveloped resources of the expanded Australian fishing zone. Foreign and/or joint foreign and Australian companies are authorised to use foreign vessels and crews under strictly controlled arrangements to evaluate resources under commercial or near commercial conditions. This opportunity to increase knowledge at little or no cost has been used to investigate the squid resource with Japanese jigging vessels and deepwater trawling with a Polish factory trawler.

Processing and Retailing Development

A program of regular visits to processors and retailers ensures close contact with the industry. Developments in other countries are monitored and up to date advice is available on most topics. Assistance with the setting up of plants and shops has been given and other activities include the investigation of products and processes. An increased effort to improve quality awareness throughout the industry is under way.

Promotions and Market Development

Promotional activities are directed at increasing public awareness and thus consumption of Tasmanian seafoods. Cooking demonstrations, in-store promotions and a recipe service are continuing activities supported by special events such as exhibits at fishing expositions.

A weekly report on fish prices for local radio has been provided since 1979 and the industry is continually advised of interstate and overseas market changes and new opportunities. Detailed situation reports have been prepared on pacific oysters, rainbow trout and mussels. The Authority has been an approved body under the Export Incentive Scheme since December 1980 and this will assist in continuing to forward product samples and information overseas.

Training

As well as the courses offered in gear development the Authority has provided training in fish handling, quality control, fish filleting, scallop splitting and business management. Close co-operation with such bodies as the Australian Maritime College and Tasmanian Fishing Industry Training Committee ensures a comprehensive training programme for all sectors of the industry. Schools are provided with teaching aids on fisheries and demonstrations of fish cooking. The bi-monthly publication FINTAS assists in this programme as well as providing the industry with advice on all Authority activities and fisheries information.

Industry Assistance

A Fisheries Finance Plan which was introduced in February 1978 operates in association with the Agricultural Bank of Tasmania and links developmental aspects of the *Fisheries Development Act 1977* with the *State Advances Act*.

The aim of the Plan is to provide a range of financial incentives through concessional interest rates and deferment of capital repayments to stimulate investment in the development of the fishing industry. The degree of financial assistance offered is linked to the proportion of fishing time spent in fisheries classified as developmental.

The State Government has for many years provided capital funds for port facilities for fishermen such as jetties and slipways. The Authority supervises these facilities and acts with industry representatives and the Department of Main Roads in the provision, maintenance and operation of them.

Fisheries Management

Staff of the Authority are responsible to the Minister for Fisheries for the implementation of the provisions of the *Fisheries Act* where it relates to tidal waters. These responsibilities principally relate to the monitoring and management of commercial and recreational fishing.

Fishermen are required to furnish monthly returns of their fishing activities which indicate catches, place of fishing and amount of time spent and equipment used. Fish processors provide monthly statistics on purchases and prices. This information, together with the measurement of samples of the catch, is used to monitor the state of each fishery and, with the help of research developed mathematical models, predict the likely future state of the fishery and the effects if fishing effort changes. This monitoring provides information which together with economic data aids in determining what changes might be necessary to fisheries laws to protect, conserve and rationally utilise each fish resource.

Since 1965 Tasmania has closely managed its valuable fisheries such as rock lobster and abalone and required detailed licensing procedures and comprehensive controls on fishing methods. (Such measures were first introduced for the scallop fishery in the 1940s.) A licensing section and a field force of inspectors implement this system. Inspectors are decentralised at seven centres and equipped with modern fast and ocean-going patrol vessels. Fisheries inspectors also are the principal points of contact between the Authority and fishermen and provide the immediate source of information from Authority to industry and advise the Authority of matters concerning the industry.

Further References

ABS Publications Produced by the Tasmanian Office

Sawmilling, Woodchipping, etc. Statistics, Tasmania (8203.6), quarterly.
Mining Industry, Tasmania (8401.6), annual.

ABS Publications Produced by the Canberra Office

ASIC, Australian Standard Industrial Classification (irregular, 1978 edition released June 1978)—
Vol. 1: The Classification (1201.0)
Vol. 2: Alphabetic Index of Primary Activities (1202.0)
Mineral Production (8405.0), annual.
Fisheries (7603.0), annual.

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Chapter 14

MANUFACTURING

INDUSTRIAL DEVELOPMENT

Primary-Secondary Relativity

Prior to World War II, there were few large manufacturing establishments in Tasmania. The economy of the State was dominated by primary industries which, in 1938-39, accounted for 60 per cent of the net value of production of all recorded industries.

Post-war expansion of factory activity, particularly in the 1950s and 1960s, has made the State an important supplier of manufactured goods and processed materials. Major factories which have been established since World War II include producers of chemicals, woodpulp, textiles, processed foods, industrial equipment, refined aluminium, manganese alloys, iron ore pellets and woodchips. Steady, large-scale development of the State's hydro-electricity resources assisted such expansion.

Since the early 1950s, the manufacturing sector has been predominant in terms of its economic significance to the State and now has a value added more than double that of agriculture and mining combined. (See the section 'Integrated Economic Censuses' in Chapter 19 for an inter-sector comparison of various industry sectors.)

Tasmania as a Site for Industry

Advantages

Tasmania has certain advantages which have attracted new industrial enterprises. The principal factors are:

Hydro-Electric Power: The availability of competitively priced, bulk electricity for power intensive industries (e.g. metal smelting and refining, heavy chemicals, paper and paper-pulp making) has had a significant influence on Tasmania's industrial development in the past and is discussed in greater detail in the next chapter.

Raw Materials: Locally available raw materials provide the basis for many industries such as textiles, dairy foods and vegetable processing. Large timber reserves have led to the establishment of pulp and paper manufacturing, sawmilling and woodchipping.

Stability of the Workforce: Tasmania has established a record over many years for having fewer industrial disputes and, almost always, fewer days lost per employee each year due to strikes, than any other Australian state. The Tasmanian workforce also exhibits a more stable pattern in terms of duration of employment.

Industrial Land, Harbours and Shipping: The decentralized nature of the State and a policy of making provision for industry in each main region has enabled industrial land to be both readily available and cheap. Its proximity to deep-sea ports is another factor influencing the expansion of industry in and around the four main centres of population (Hobart, Launceston, Burnie and Devonport). The associated ports are fully equipped to handle unitised, containerised, roll-on/roll-off and orthodox cargoes, as well as cargo in bulk form. They are served by overseas and interstate ships using modern cargo handling techniques.

Water Resources: In some parts of the world, water resources are inadequate; shortage of water and the high cost of conservation, re-use and 'purification' have become

major problems in the expansion of industry. This is not the situation in Tasmania where water is abundant. The terrain favours the economical construction of high-level storages, while run-of-the-river pumping schemes are feasible at many sites.

The Department of Industrial Development

The policy of the State Government is to encourage the establishment and growth of industries in Tasmania and to promote trade as provided by the *Industrial Development Act 1954*. This Act is administered by the Director of the Department of Industrial Development under the Minister for Economic Planning and Development.

The Department of Industrial Development gives advice, information and assistance on a wide range of important industry matters. It is empowered to provide financial assistance, including loan guarantees and a comprehensive grants and incentives program, to help the expansion of existing industries and the establishment of new enterprises. The Department has established an industrial estate at Legana, near Launceston, which offers fully serviced land close to interstate transport terminals for new or expanding manufacturing industries. As a service to industry, the Department has officers specialising in the areas of finance, trade, development, industrial design, research, small businesses and the publication of information, and they are supported by the resources and expertise of Federal and other State Government departments and instrumentalities. The Department's Trade and Development staff represent Tasmanian manufacturers on trade missions to many overseas countries. Tasmanian products are also promoted by Departmental officers at numerous National trade fairs and exhibitions.

Small businesses are assisted through the Small Business Advisory Service which was established to improve their overall management and assist them to achieve their real potential. The assistance provided includes organising seminars and education courses for small businessmen in conjunction with education authorities.

An industrial design field officer provides technical advice and encourages the manufacture of higher quality products.

The Economic Research Section carries out regular analyses of the Tasmanian economy and supplies a wide variety of economic information to the Department and to Government. This section also produces State and regional population forecasts for use by Government agencies.

Regular State-wide field trips are made by the Department's Development, Trade and Small Business Officers, and in the north of the State services are provided by a regional office at Launceston.

Major Industries

Source of Data: In normal circumstances, the Bureau of Statistics does not publish information relating to any single enterprise or establishment, and treats any such information it collects as strictly confidential. It does, however, publish statistical aggregates where they do not directly or indirectly reveal the operations of any single informant. A description of industrial development without mentioning individual organisations is not very illuminating; therefore, the State Department of Industrial Development has prepared the following section and accepts responsibility for the information given.

Associated Pulp and Paper Mills Ltd (Burnie, Wesley Vale, Long Reach, Triabunna): This group of companies is a major Australian integrated forest products complex and Australia's principal producer of fine printing and writing papers, magazine papers and coated papers. In Tasmania the Company operates major manufacturing complexes at four centres: (i) *Burnie*—where it commenced paper production in 1938; present annual capacity of the Burnie pulp and paper plant is 145 000 tonnes. In addition the Company operates three sawmills at Burnie and Wynyard through its wholly owned subsidiary company, Burnie Timber Pty Ltd. The Company also acquired, in 1979, Tasmanian Plywood Mills Pty Ltd which is based at Somerset. (ii) *Wesley Vale*—In 1970 the first stage of an integrated pulp and paper complex was completed when the first paper machine commenced production. The machine has an annual capacity of about 45 000 tonnes of paper. Production at Wesley Vale is mainly of magazine papers. A particle board factory, run by the subsidiary Burnie Timber Pty Ltd, also operates at Wesley Vale;

annual production is about 2.0m square metres. (iii) *Long Reach*—APPM completed its woodchip plant and made its first export shipment in 1972. The Company has long-term contracts for the export of woodchips to Japan. (iv) *Triabunna*—In 1979 APPM took over Tasmanian Pulp and Forest Holdings Ltd which operates a woodchip export mill at Triabunna and also has long-term contracts with Japan.

Australian Newsprint Mills Ltd (Boyer): Since beginning operations in 1941, this Company has increased its annual production of newsprint from 27 400 tonnes to its present capacity of 220 000 tonnes. The Company has installed two modern grinders, at a cost of approximately \$2 million, to increase capacity and replace obsolete machines. At present the company is planning to install two new paper winders at a cost of \$5.1 million to replace existing equipment and improve product quality. ANM is Australia's only producer of newsprint and supplies approx. 85% of Australia's requirements. ANM is the largest company with its head office in Tasmania and indicates that there is an optimistic future for expansion of its operations in this State.

Cadbury Schweppes Australia Ltd (Claremont): In 1921 an association of three British confectioners established their Australian plant at Claremont, near Hobart. Today, the plant is the largest cocoa and confectionery factory in Australia. In conjunction with H. P. Bulmer and Co., a plant was installed at Claremont in 1974 for apple juice extraction and concentration for export. The Pascall sugar confectionery production was transferred to Victoria at the end of 1980 but has been replaced in volume terms by increased bulk chocolate shipment to the Mainland and the transfer of the 'Snack' moulded range to Claremont.

Cascade Group of Companies (Statewide): The Company is the oldest manufacturing company in Australia and is firmly established in the beverage industry at manufacturing, wholesale and retail levels. The Company manufactures alcoholic beverages through the only two breweries in the State: at Esk Breweries, Launceston (Boags Beer) and Cascade Brewery, Hobart (Cascade Beer). Alcoholic cider (manufacturer, Huoncry), non-alcoholic cider, soft drinks, pure fruit juices, fruit juice syrups, berry fruit pulps and concentrates for local and export distribution are manufactured at Cascades, Hobart.

Coats Patons (Aust.) Ltd (Launceston): This Company first produced yarns in Tasmania nearly 60 years ago. The factory produces knitting yarns, both wool and synthetic, and annual production is approximately 1.5 million kilograms.

Comalco Aluminium (Bell Bay) Ltd (George Town): An aluminium smelter and refinery commenced production 1955 at Bell Bay under Federal Government ownership. In 1961 the plant and facilities were acquired by the present Company which has increased production of aluminium nine-fold. Products made include rolling block, extrusion billet, foundry ingot, bus bar (horizontally cast), sows, T-ingot and granules. An associated company, Comalco Aluminium Powder, produces aluminium powder, aluminium paste and high alloy briquettes.

Edgell, Division of Petersville Ltd (Devonport and Ulverstone): This company is Tasmania's leading processor of frozen and canned vegetables. The annual volume of raw materials required by the Ulverstone and Devonport factories is approximately 135 000 tonnes, the main crops processed being potatoes, green peas and green beans.

Electrolytic Zinc Company of A/Asia Ltd (Risdon and Rosebery): Established in 1916, the factory at Risdon is the largest producer of zinc in Australia and the second largest electrolytic-zinc plant in the world. It exports an extensive range of zinc and zinc alloys to over 30 countries. The Risdon plant has the capacity to produce more than 600 tonnes of zinc per day. Apart from the zinc and zinc alloys, the company also produces cadmium, sulphuric acid, superphosphate, and aluminium sulphate. The zinc plant supplies a large proportion of Australia's total requirements.

Mine production capacity at the Company's West Coast mines at Rosebery is 650 000 tonnes of silver-lead-zinc-copper-gold ore per annum. The associated concentrating mill at Rosebery has capacity to treat 850 000 tonnes of ore per annum including treatment of ore from the Que River mine.

General Jones Pty Ltd (Smithton and Scottsdale): General Jones is a wholly owned subsidiary of Henry Jones (IXL). It produces frozen vegetables, of which the main brands are Copper Kettle and Pict. In 1981 freezer capacity was increased and production facilities were upgraded at both plants.

Goliath Portland Cement Co Ltd (Railton): The Company began production in 1930 with an annual output of 66 000 tonnes of cement. Plant capacity now stands at one million tonnes of cement per annum and approximately one million square metres of asbestos cement sheeting are produced. The Company operates its own 4 000 tonne ship, the *M.V. Goliath*, to transport bulk cement to mainland markets. In 1979 it acquired the Cornwall Coal Co. N.L., Tasmania's only coal producers.

Humes Ltd (Statewide): Humes produce pre-cast concrete, UPVC and high density polyethylene pipes and fittings for a wide range of uses. The Company's Steel Division plant at Burnie prefabricates reinforcing mesh and rod. Steel Mains Pty Ltd, a subsidiary company manufactures water, steam and oil lines up to six metres in diameter. This company also produces pressure vessels, spheres, bulk storage tanks etc. A subsidiary company, Tita Fittings Pty Ltd manufactures brass fittings used in connection of polyethylene pipes. ARC Engineering Pty Ltd, another subsidiary company produces steel reinforcement and mesh. A field crew operates throughout the State installing all types of structural steel, pipelines and mechanical items.

Repco Bearing Co (Launceston): In 1949 this company was established to manufacture engine bearings for the Australian automotive spare parts trade. The factory has since expanded and diversified its range of products and is now the only automotive bearing manufacturing company in Australia. The Company also undertakes general contract machining, precision tool making, and the manufacture of sintered products using powder metallurgy techniques.

Sheridan Textiles (Derwent Park): Formerly known as UTA Hobart Mill, then Sheridan Domestic Textiles is part of the Clothing, Footwear and Textile Group of Dunlop Australia Ltd. The Derwent Park mill commenced operations as Silk & Textile Printers Pty Ltd in 1948. Production now involves the printing of natural and synthetic furnishing fabrics, shower curtain fabrics and mattress ticking, and printing and dyeing of polyester/cotton sheeting. The mill also manufactures and distributes finished domestic articles in the form of printed and plain dyed sheets, continental quilt covers, and ruffled pillowcases in fine polyester/cotton percale, and nylon shower curtains.

Stanley Tools (Moonah): A Division of the Stanley Works Pty Ltd: Tasmania's only manufacturer of hand tools commenced production of a range of extruded plastic screwdriver handles in 1983 with a capital investment of \$800 000. These handles will be a quality improvement replacing the injection moulding. Also, a fully integrated computerised manufacturing control system will be implemented during 1983.

Tasmanian Electro-Metallurgical Co. Pty Ltd (Bell Bay): In 1962 BHP transferred its major alloy making from Newcastle to a green field site at Bell Bay. Expansion in 1976 gave export capacity and added ferro-silicon and manganese ore sinter to the existing produce range of high carbon ferro-manganese and silico-manganese. Exports form a significant proportion of production, and are being made to steelmakers and foundries in SE Asia, the Middle East and around the Pacific Basin. Capacity is now about 150 000 tonnes per annum of ferro alloys and 250 000 tonnes per annum of manganese ore sinter. Due to a downturn in the world steel industry, operations during 1982 were reduced.

Tioxide Australia Pty Ltd (Burnie): This Company is a manufacturer of titanium pigments which are used as the base white pigment in paints, enamels, plastics, printing inks, rubber, paper, man-made fibres and a number of other products. At the present time, 10 different grades of pigment are made to meet the varying requirements of user industries. The Company was formed in 1937 as Australian Titan Products Pty Ltd. Plans for construction of the Heybridge plant were delayed by the Second World War and the factory was commissioned in December 1948. The initial annual output was 1 500 tonnes compared with a current capacity of 32 000 tonnes. The company commenced a \$6.5 million capital program of modernisation during 1982 in order to maintain its competitive

position. Tioxide is the predominant supplier of titanium pigments to the Australian market and an increasingly significant supplier to SE Asian countries. A staff of approximately 400 was employed in mid-1982.

Tootal Australia Pty Ltd (Devonport): This Company was established in 1952 to manufacture woven and knitted man-made fibre fabrics. It produces workwear fabrics in polyester/cotton, and polyester/viscose, fashion dress goods, both dyed and printed, and a wide range of garments for industrial and casual end use. The Company has Australia-wide distribution through its own selling offices in all capital cities. Employment is in excess of 370.

United Milk Tasmania Ltd (Smithson, Devonport, Legerwood): This is one of the State's largest manufacturers of dairy products and processes approximately 70% of the milk produced in the State. Annual production has recently reached approximately the following levels: butter (salted and unsalted), 5 000 tonnes; cheese (cheddar), 10 000 tonnes; milk powders (skim, full cream and buttermilk), 7 000 tonnes; whey powder, 500 tonnes; casein (acid), 500 tonnes; whey proteins (35%, 50% and 75%) 1 500 tonnes. The Company also operates a meat works and smallgoods factory, exporting 90% of its output overseas.

MANUFACTURING STATISTICS

Selected Articles Manufactured

The articles listed below do not include the following important Tasmanian products: aluminium, automotive engine bearings, cement, confectionery, ferro-manganese alloys, hand tools, hardboard, iron ore pellets, particle board; printing, writing and wrapping papers, starch, titanium di-oxide, canned, dehydrated and quick frozen vegetables, woodpulp, woollen manufactures, and other textile products. Where there are only one or two producers or where one producer dominates, it is not possible to publish details for articles that are important and would otherwise be included. Some articles, although principal manufactures, such as cakes, pastry and pies, wooden furniture and joinery (excluding doors) are not included, as value details only are collected for such items.

The following table lists selected articles manufactured in Tasmania for recent years:

Selected Articles Manufactured: Quantities, Tasmania

Article	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Acid, sulphuric	506 338	522 154	414 644	302 550	253 547	335 507
Aerated waters '000 l	18 786	20 082	19 834	18 361	19 397	19 108
Apples, preserved (solid pack)	4 203	5 215	4 740	3 922	4 941	4 016
Bacon and ham	2 434	2 505	2 457	2 094	2 375	2 634
Bricks, blocks, etc. '000	65 893	64 116	59 665	63 154	62 990	54 468
Butter (a)	9 707	7 910	7 075	5 461	4 234	n.a.
Cheese	13 156	13 903	17 494	15 431	13 905	n.a.
Concrete, ready mixed m ³	284 555	288 466	260 367	250 021	249 715	226 702
Electricity, total generated m kW.h	6 842	7 179	7 748	7 903	8 044	8 122
Flour	32 427	32 780	34 901	37 269	37 811	35 068
Paper, newsprint	206 590	207 621	208 143	221 460	214 446	219 429
Superphosphate	101 281	97 012	151 489	132 783	139 869	126 416
Timber—						
Sawn, peeled or sliced (b)—						
Hardwood '000 m ³	330.9	299.3	289.2	287.6	298.3	255.6
Softwood '000 m ³	37.3	39.3	31.3	67.6	75.6	71.7
Dressed—						
Floorboards '000 m ³	45.4	37.2	28.1	51.2	14.8	n.y.a.
Weatherboards '000 m ³	0.4	0.3	0.4	1.7	n.p.	n.y.a.
Other '000 m ³	90.0	69.3	65.6	116.1	47.5	n.y.a.
Woodchips, etc. (greenweight) (c)	2 967	2 838	2 978	3 673	3 428	3 119
Zinc, refined	170 685	161 173	204 623	191 683	188 471	193 714

(a) Includes butter equivalent of butter oil.

(b) Includes timber to be further processed.

(c) Defined in forestry section of Chapter 13.

Manufacturing Censuses

Annual censuses of factories have been conducted from almost the start of the present century; the last 'old style' factory census covered the year 1967-68. For 1968-69 simultaneous integrated economic censuses were undertaken in respect of manufacturing and four other sectors (mining; wholesale trade; retail trade and electricity and gas production and distribution).

The 1968-69 integrated economic censuses were fully described in Appendix A of the 1972 *Year Book* in which there also appears an explanation of the factors which made necessary the termination of 'old style' factory censuses and the start of a new series, based on new reporting units and data concepts. In the following section, the results of the manufacturing census for 1980-81 are given.

Definitions and data concepts applying to the integrated economic censuses will be found in the section 'Integrated Economic Censuses' in Chapter 19 of this edition. Also, results from manufacturing censuses are compared with those from integrated economic censuses covering other industry sectors in that section.

Census Results

Manufacturing Establishments Classified According to Industry

The table that follows contains a summary of the principal manufacturing statistics by industry sub-division. Single establishment enterprises employing less than four employees at 30 June 1981 are excluded from this table:

Manufacturing Establishments: Operations by Industry Sub-division, Tasmania 1980-81							
ASIC code (a)	Industry sub-division Description	Estab- lish- ments operat- ing at 30 June	Employment			Wages and salaries	Turn- over
			Males	Females	Persons		
		no.	no.	no.	no.	\$'000	\$'000
21	Food, beverages and tobacco	121	4 024	1 765	5 789	67 060	488 581
23	Textiles	9	851	876	1 727	16 982	70 461
24	Clothing and footwear	6	76	133	209	2 085	6 472
25	Wood, wood products and furniture	149	3 472	252	3 724	44 071	242 266
26	Paper, paper products; printing and publishing	44	4 823	720	5 543	83 759	361 742
27	Chemical, petroleum and coal products	15	993	62	1 055	18 029	85 698
28	Non-metallic mineral products	47	781	55	836	11 503	71 968
29	Basic metal products	9	3 520	124	3 644	57 739	378 265
31	Fabricated metal products	82	1 713	272	1 985	20 733	87 039
32	Transport equipment	20	475	145	620	8 316	22 989
33	Other machinery and equipment ..	34	876	99	975	11 612	30 759
34	Miscellaneous manufacturing	22	338	83	421	4 662	20 842
	Total manufacturing	558	21 942	4 586	26 528	346 551	1 867 082

Manufacturing Establishments: Operations by Industry Sub-division, Tasmania 1980-81

ASIC code (a)	Industry sub-division Description	Stocks		Purch- ases, transfers in and selected expenses	Value added	Rent, leasing, and hiring expenses (b)	Fixed capital expen- diture
		Opening	Closing				
		\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
21	Food, beverages and tobacco	59 146	59 761	348 439	140 757	5 109	9 565
23	Textiles	17 150	17 604	37 603	33 311	291	2 197
24	Clothing and footwear	291	367	2 736	3 812	81	41
25	Wood, wood products and furniture	37 662	43 553	140 298	107 859	1 966	7 994
26	Paper, paper products; printing and publishing	39 244	48 634	205 231	165 901	3 432	11 477
27	Chemical, petroleum and coal products	21 651	24 255	57 119	31 184	219	9 210
28	Non-metallic mineral products	9 188	10 003	46 501	26 282	546	1 932
29	Basic metal products	71 021	70 917	250 021	128 139	650	8 548
31	Fabricated metal products	14 458	13 951	49 785	36 746	885	2 484
32	Transport equipment	3 912	4 366	11 729	11 714	176	5 473
33	Other machinery and equipment ..	3 959	5 502	14 753	17 550	321	629
34	Miscellaneous manufacturing	2 690	3 338	11 299	10 190	311	657
Total manufacturing		280 371	302 251	1 175 515	713 445	13 987	60 208

(a) Australian Standard Industrial Classification code.

(b) Outlay on fixed tangible assets less disposals.

Manufacturing by Statistical Division

The next table shows, as a time series, the chief measures of manufacturing operations by statistical divisions:

Manufacturing Establishments: Main Items by Statistical Division (a)

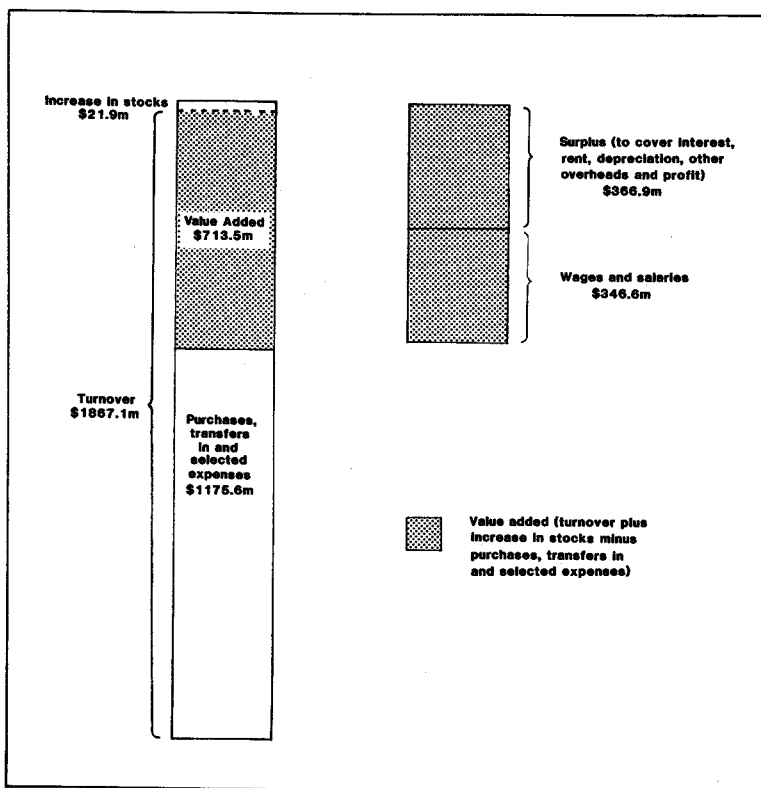
Main items	Unit	Year ended June	Statistical divisions			Tasmania
			Hobart and Southern	Northern	Mersey- Lyell	
Number of establishments .	no.	1979	213	192	147	552
		1980	219	187	137	543
		1981	226	195	137	558
Employment(b)—						
Males	no.	1979	8 394	6 628	6 364	21 386
		1980	8 424	6 784	6 312	21 520
		1981	8 446	7 093	6 403	21 942
Females	no.	1979	1 857	1 401	1 422	4 680
		1980	1 678	1 440	1 520	4 638
		1981	1 751	1 464	1 371	4 586
Persons	no.	1979	10 251	8 029	7 786	26 066
		1980	10 102	8 224	7 832	26 158
		1981	10 197	8 557	7 774	26 528
Wages and salaries	\$'000	1979	96 072	82 805	87 223	266 099
		1980	106 383	94 185	97 628	298 196
		1981	127 541	112 622	106 388	346 551
Value added (c)	\$'000	1979	188 015	172 354	189 003	549 372
		1980	230 767	236 708	186 295	653 770
		1981	232 627	257 497	223 320	713 445
Fixed capital expenditure ..	\$'000	1979	22 409	11 917	42 791	77 116
		1980	18 048	16 976	20 909	55 933
		1981	23 275	18 312	18 620	60 208

(a) Excludes details for single establishment enterprises employing less than four persons at 30 June.

(b) Includes working proprietors; figures are average over whole year.

(c) The method of calculating value added was changed slightly from 1978-1979.

Manufacturing Establishments, Value Added, Tasmania, 1980-1981



Tasmania in Comparison with Other Australian States

A comparison of Tasmanian manufacturing activity with that of the other Australian states and territories is shown in the following table. Applying the appropriate population relativity factors to the figures, it will be seen that, on the basis of the resulting values, Tasmania is relatively more industrialised than Queensland, Western Australia, the Northern Territory and the Australian Capital Territory and approaches the level of South Australia.

Tasmania-Australia Comparison of Manufacturing Activity, 1980-81

State or territory	Popula- tion relativity (a)	Estab- lish- ments	Wages and salaries	Turn- over (b)	Stocks		Pur- chases, etc. (c)	Value added
					Opening	Closing		
Actual Value								
		no.	\$m	\$m	\$m	\$m	\$m	\$m
NSW	12.2	10 334	5 884	26 898	4 235	4 856	16 653	10 865
Vic.	9.2	8 726	5 032	23 856	3 809	4 207	14 814	9 440
Qld.	5.4	3 291	1 410	9 667	1 024	1 154	6 722	3 075
SA	3.1	2 131	1 283	6 067	1 091	1 104	3 693	2 387
WA	3.0	2 426	869	4 902	563	686	3 149	1 877
Tasmania	1.0	558	347	1 867	280	302	1 176	713
NT	0.3	98	42	292	49	84	231	96
ACT	0.5	117	45	163	14	17	89	77
Total Australia	34.8	27 681	14 911	73 712	11 064	12 410	46 526	28 531

continued next page

Tasmania-Australia Comparison of Manufacturing Activity, 1980-81 —continued

State or territory	Popula- tion relativity (a)	Estab- lish- ments	Wages and salaries	Turn- over (b)	Stocks		Pur- chases, etc. (c)	Value added
					Opening	Closing		
Values Relative to Population (d)								
NSW	847	482	2 205	347	398	1 365	891
Vic.	948	547	2 593	414	457	1 610	1 026
Qld.	609	261	1 790	190	214	1 245	569
SA	687	414	1 957	352	356	1 191	770
WA	809	290	1 634	188	229	1 050	626
Tasmania	558	347	1 867	280	302	1 176	713
NT	327	140	973	163	280	770	320
ACT	234	90	326	28	34	178	154
Total Australia	795	428	2 118	318	357	1 337	820

(a) Tasmania's total mean population for 1979-80 is expressed as 1.0; other state populations in proportion to 1.0.

(b) Sales, transfers out and other operating revenue.

(c) Purchases, transfers in and selected expenses.

(d) Figures are calculated by dividing the actual figures by the appropriate population relativity factor. They do not represent direct per head of population details but merely a comparison of the degree of manufacturing activity in each state relative to population.

Tasmania-Australia Comparison

In 1980-81 the Tasmanian share of Australian employment in manufacturing was 2.31 per cent; and of Australian 'value added' in manufacturing, 2.49 per cent. (Tasmanian's mean population as a proportion of Australia's for 1980-81 was 2.87 per cent.)

CENSUSES OF ELECTRICITY AND GAS ESTABLISHMENTS

Until 1968-69 factory production statistics contained details of Class XVI (Heat, Light and Power); in the 'old style' annual factory censuses, of which the last covered 1967-68, this class was confined to the *production* of electricity and gas and such operations were treated as a particular type of factory activity. For 1968-69 simultaneous economic censuses were undertaken in respect of electricity and gas production and distribution and four other sectors (manufacturing; retail trade; wholesale trade; and mining). Details relating to the 1968-69 census of electricity and gas establishments are included in the 1973 *Year Book*; results from censuses conducted for 1969-70 and 1971-72 may be found in the 1974 and 1977 editions of the *Year Book*, respectively. Details from the 1974-75 census onwards for Tasmania cannot be released because of confidentiality restrictions.

Further References*A.B.S. Publications Produced by the Tasmanian Office:*

Census of Manufacturing Establishments, Details of Operations and Small Area Statistics, Tasmania (8202.6), annual.

A.B.S. Publications Produced by Central Office, Canberra:

Census of Manufacturing Establishments, Summary of Operations by Industry Sub-division, (Preliminary) Australia (8201.0), annual.

Manufacturing Establishments, Summary of Operations by Industry Class, Australia (8202.0), annual.

Manufacturing Commodities, Principal Materials Used, Australia (8210.0), irregular.

Production Statistics, Australia (Preliminary) (8301.0), monthly.

Manufacturing Commodities, Principal Articles Produced, Australia (8303.0), annual.

Production Bulletins (monthly), Australia—

No. 1: Electricity, Gas and Electrical Appliances (8357.0).

No. 2: Clothing and Footwear (8358.0).

No. 3: Food, Drink and Tobacco (8359.0).

No. 4: Textiles, Bedding and Floor Coverings (8360.0).

No. 5: Building Materials and Fittings (8361.0).

No. 6: Chemicals and By-Products (8362.0).

No. 7: Motor Vehicles, Parts and Accessories (8363.0).

No. 8: Miscellaneous Products (8364.0).

Manufacturing Commodities Selected Principal Articles Produced, Australia (Preliminary) (8365.0), annual.

Other Publications:

DEPARTMENT OF INDUSTRIAL DEVELOPMENT. *Tasmanian Manufacturers Directory* (biennial, Tasmanian Government Printer, Hobart).

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Chapter 15

ENERGY

ENERGY IN TASMANIA

The increasing use of energy has been the basis of the expansion of the economies of the Western World and the growth in living standards. Tasmania participated in this expansion; in the twenty years to 1980 energy consumption grew by an average annual rate of 4.4 per cent. The disruption of world oil supplies and an increase in prices in the seventies led to a re-examination of energy policy. Industrial growth slowed in response to the energy situation and the rate of increase in energy consumption declined. Tasmania's growth rate in energy use slowed to 3 per cent in the decade to 1980, a rate lower than most other Australian states.

In 1980-81 primary energy consumption in Tasmania was 80,000 tetrajoules, which was the lowest per capita of any state in Australia. Most was supplied by petroleum products (49%) and hydro-electricity (36%). Small amounts were derived from black coal (6%) and wood (9%). The manufacturing and mining industry was the largest consumer of energy using 47 per cent, transport took 26 per cent (all in the form of petroleum products) and the residential and commercial sector used 18 per cent.

Net Energy Consumption, Tasmania (Petajoules)

Source: *Energy Demand and Supply, Australia, 1960-61 to 1980-81*, Department of National Development and Energy, November 1982.

Sector	1976-77	1977-78	1978-79	1979-80	1980-81
Industry (a)					
Agriculture	1.3	1.3	1.4	1.7	2.1
Mining	4.6	4.7	4.7	4.6	4.6
Manufacturing—					
Food beverages tobacco ..	2.3	2.1	2.1	2.5	2.3
Textiles etc.	0.7	0.6	0.6	0.5	0.5
Wood, wood products	1.9	1.6	1.6	1.7	1.5
Paper, paper products	8.8	8.3	8.9	10.4	8.4
Chemicals, petroleum,					
Coal	1.7	1.6	1.5	1.6	1.1
Non-metallic minerals	2.6	2.5	2.9	2.5	2.6
Basic metals	12.8	14.5	16.9	16.6	16.0
Other manufacturing	0.3	0.4	0.3	0.3	0.4
Total manufacturing ...	31.1	31.6	34.8	36.1	32.8
Electricity Gas and Water	2.4	3.2	2.3	2.8	4.0
Construction	0.9	0.8	1.2	1.7	1.2
Commercial	0.9	0.9	0.9	0.9	0.9
Transport and Storage—					
Road transport	16.0	16.5	17.2	17.2	17.2
Rail, water,					
and air transport	3.7	3.2	3.2	3.6	3.3
Total transport					
and storage	19.8	19.7	20.5	20.8	20.6
Public administration	0.2	0.1	0.1	0.1	0.1
Community services	0.8	0.8	0.8	0.9	0.9
Total industrial sector	62.1	63.1	66.7	69.6	67.2
Residential	13.1	12.8	13.3	13.0	12.8
TOTAL	75.1	76.0	79.8	82.6	80.1

(a) By ASIC. See *Australian Standard Industrial Classification*, Volume 1. (1201.0), Australian Bureau of Statistics, Canberra.

ENERGY CONSUMPTION, TASMANIA 1980-81

FUEL TYPE	OTHER	FUEL TYPE FOR EACH END USE	OTHER FUELS OTHER INDUSTRIES	END USE
COAL		MINING - MANUFACTURING		OTHER
WOOD		RESIDENTIAL- COMMERCIAL		
		OTHER	MINING -MFG	RESIDENTIAL - COMMERCIAL
ELECTRICITY		RESIDENTIAL- COMMERCIAL		
		MINING- MANUFACTURING		TRANSPORT
		OTHER		
		RESIDENTIAL -COMM		
PETROLEUM PRODUCTS		MINING - MANUFACTURING		MINING - MANUFACTURING
		TRANSPORT		

SOURCE: DEPARTMENT OF NATIONAL DEVELOPMENT AND ENERGY

Petroleum Products

All Tasmania's petroleum products are imported. In primary energy terms nearly half is used for transportation. Tasmanian industry is heavily reliant on furnace oil which is particularly vulnerable to supply disruptions and price fluctuations as it is almost entirely imported from overseas. The table below shows consumption of petroleum products in Tasmania.

Consumption of Petroleum Products, Tasmania
Source: Department of National Development and Energy
(million litres)

Product	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
LPG	n.a.	n.a.	r7	r10	r10	9
Aviation gasoline	4	4	4	3	3	3
Automotive gasoline—						
Super	346	358	370	365	367	377
Standard	60	56	58	56	49	41
Total	406	414	428	421	416	418
Aviation turbine fuel	24	28	35	41	35	35
Lighting kerosine	10	9	8	6	4	4
Heating oil	79	73	67	44	29	26
Power kerosine	1	—	—	—	—	—
Automotive diesel oil—						
Inland	162	168	189	210	217	206
Bunkers	5	1	5	3	4	3
Total	167	169	193	213	220	209
Industrial and marine diesel fuel—						
Inland	68	80	45	38	30	28
Bunkers	47	36	24	31	25	14
Total	114	116	69	70	56	42
Fuel oil—						
Inland	233	226	254	290	252	335
Bunkers	8	5	7	6	10	4
Total	242	231	261	296	262	339
Lubes	n.a.	n.a.	n.a.	n.a.	n.a.	11
Bitumen	n.a.	n.a.	n.a.	n.a.	n.a.	15
Other products n.e.i.	n.a.	n.a.	n.a.	n.a.	n.a.	1
Total all Products (a)	1 047	1 044	r1 072	r1 105	r1 035	1 112

(a) Before 1980-81 does not include lubes, bitumen and other products n.e.i.

Australia imports about 30 per cent of its crude oil requirements. Increasing dependence on imported oil has focused Federal Government attention on possible problems this might cause in terms of continuing supply and price. The Government decided to price locally produced crude oil at world parity.

Pricing local supplies of oil at the value placed on them in world markets has the advantage of encouraging:

- (i) conservation, by ensuring that energy consumers make decisions based on realistic prices;
- (ii) the substitution of petroleum products by other more readily available fuels;
- (iii) exploration and development of oil resources; and
- (iv) the development of alternative fuels.

The impact of this policy on Tasmania can be seen in the above table. Since 1978-79 there has been noticeable stabilisation or declines in the consumption of all petroleum products, with the exception of fuel oil. Sales of automotive gasoline, the major petroleum fuel used in Tasmania, have declined by 2 per cent since 1978-79. Sales of automotive diesel oil, the other major transport fuel, declined 5 per cent in 1981-82. Reductions in the use of fuel oil via fuel substitution have been more difficult to achieve in Tasmania than in the rest of Australia due at least in part to the lack of access to natural gas and

low cost coal resources. The Hydro-Electric Commission significantly increased its use of fuel oil for electricity generation during 1981-82.

Hydro-Electricity

The development of hydro-electric power has been important for the economic development of Tasmania. The first plant was opened in Launceston in 1895 at Duck Reach. Work on the statewide system did not begin until 1911 when the privately owned Hydro-Electric Power and Metallurgical Co. began work at Waddamana below Great Lake. The Company was purchased by the Government in 1914 and the Hydro-Electric Department was formed. An active policy was pursued to encourage high energy using industries to establish operations in Tasmania.

This policy was pursued in the hope of overcoming Tasmania's disadvantages of a small local market and transport problems. Zinc production began in 1916, fine paper production in 1938, aluminium smelting in 1955 and ferro-manganese production in 1962.

The HED became the Hydro-Electric Commission in 1930, free from direct ministerial control. Since Waddamana the hydro-electric system has expanded to 1.5 m kW. As well the HEC runs a thermal plant at Bell Bay with capacity of 240 000 kW.

Net Consumption of Electricity, Tasmania (Petajoules)

Source: *Energy Demand and Supply, Australia, 1960-61 to 1980-81*, Department of National Development and Energy, November 1982.

Sector	1976-77	1977-78	1978-79	1979-80	1980-81
Industry (a)					
Agriculture	0.1	0.1	0.1	0.1	0.2
Mining	2.0	2.0	2.1	2.1	2.1
Manufacturing					
Food, beverages, tobacco ..	n.a.	n.a.	n.a.	n.a.	n.a.
Textiles etc.	0.1	0.1	0.1	0.1	0.1
Wood, wood products	0.5	0.5	0.5	0.5	0.5
Paper and paper products	n.a.	n.a.	n.a.	n.a.	n.a.
Chemicals, petrol, coal ...	n.a.	n.a.	n.a.	n.a.	n.a.
Non metallic minerals	0.4	0.4	0.4	0.4	0.4
Basic metals	10.5	11.4	12.9	12.7	12.4
Other manufacturing	n.a.	n.a.	n.a.	n.a.	n.a.
Total manufacturing ..	14.8	15.7	17.4	17.6	17.5
Electricity, gas, water	2.3	2.3	2.5	2.5	2.9
Construction	—	—	—	—	—
Commercial	0.3	0.3	0.3	0.3	0.4
Transport and Storage	—	—	—	—	—
Public Administration	0.1	0.1	0.1	0.1	0.1
Community Services	0.4	0.4	0.4	0.4	0.5
Total industrial sector	20	20.9	22.9	23.1	23.7
Residential	4.7	4.9	5.2	5.4	5.5
TOTAL	24.7	25.9	28.0	28.6	29.1

(a) By ASIC. See *Australian Standard Industrial Classification*, Volume 1 (1201.0) Australian Bureau of Statistics, Canberra.

Organisation of HEC

The HEC is a statutory corporation which operates under the *Hydro-Electric Commission Act 1944*. Its responsibility is to generate, transmit, distribute and sell electrical energy. It also regulates safety standards for electrical installations and appliances. Currently it supplies 190 000 general load customers and 15 major industries. More than 4 200 people are employed. (See previous *Year Books* for more details.)

**Hydro-Electric Commission, Tasmania, Integrated System:
Operating Statistics (a)
Source: Hydro-Electric Commission**

Year	Output		Installed generating capacity (b)	Peak loading	
	Units generated	Increase over previous year		Load	Increase over previous year
	<i>million kWh</i>	<i>per cent</i>	<i>kW</i>	<i>kW</i>	<i>per cent</i>
1977	6 931	8.8	1 636 400	1 050 800	5.9
1978	7 357	6.1	1 780 400	1 159 200	10.3
1979	7 702	4.7	1 780 400	1 151 400	-0.7
1980	7 913	2.7	1 780 400	1 183 000	2.7
1981	8 003	1.1	1 780 400	1 241 100	4.9

Year	Hydro system av. capacity without thermal generation	Total system av. capacity with maximum thermal generation	Average loading		Annual load factor (c)
			Load	Increase over previous year	
	<i>kW</i>	<i>kW</i>	<i>kW</i>	<i>per cent</i>	<i>per cent</i>
1977	666 000	802 000	791 205	9.1	75.3
1978	854 000	1 033 000	839 880	6.2	72.5
1979	854 000	1 033 000	879 207	4.7	76.4
1980	854 000	1 033 000	900 823	2.5	76.1
1981	854 000	1 033 000	913 536	1.4	73.6

(a) Excludes King and Flinders Islands.

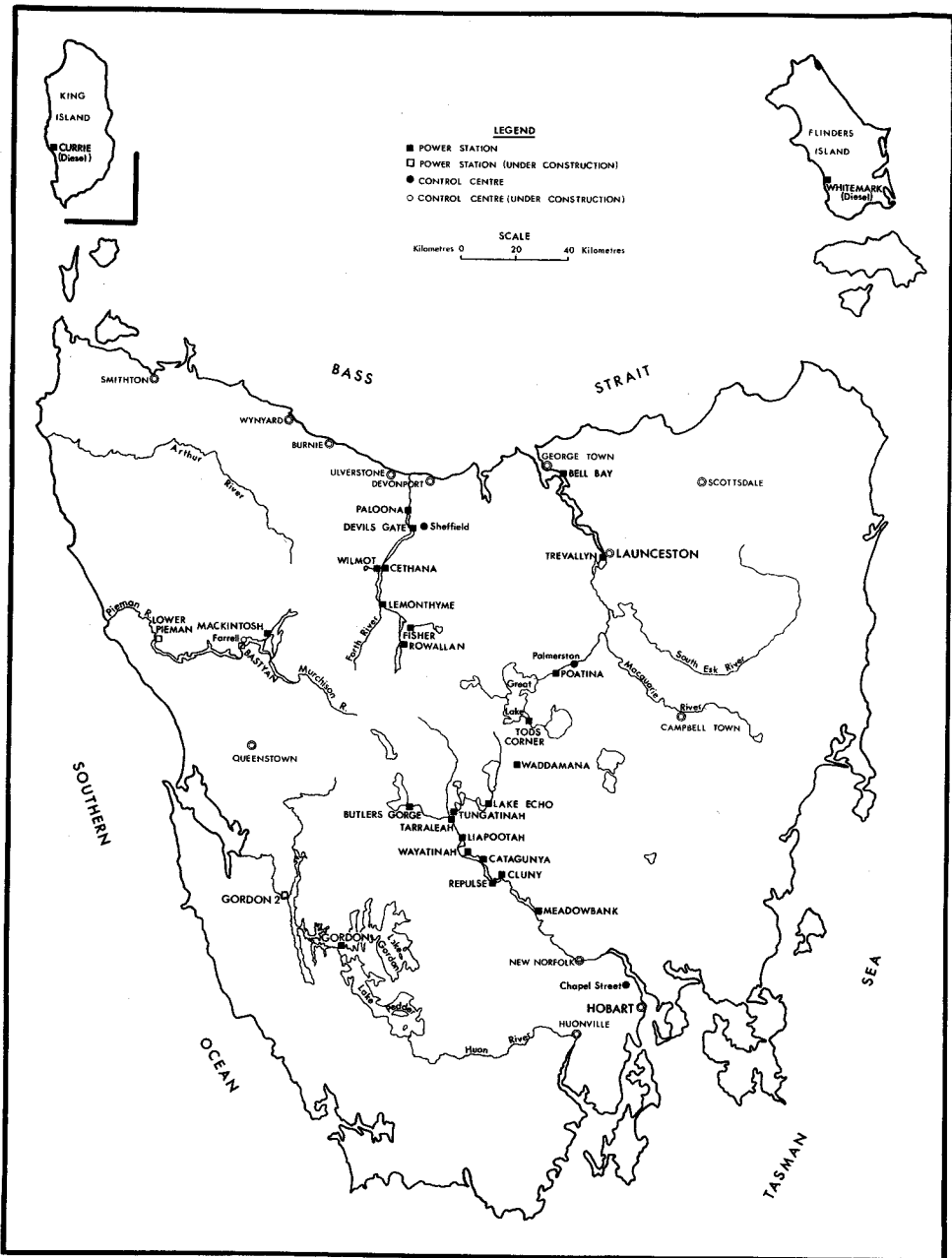
(b) At 31 December.

(c) Average annual loading as a percentage of annual peak loading.

TASMANIAN ELECTRICITY GENERATING SYSTEM

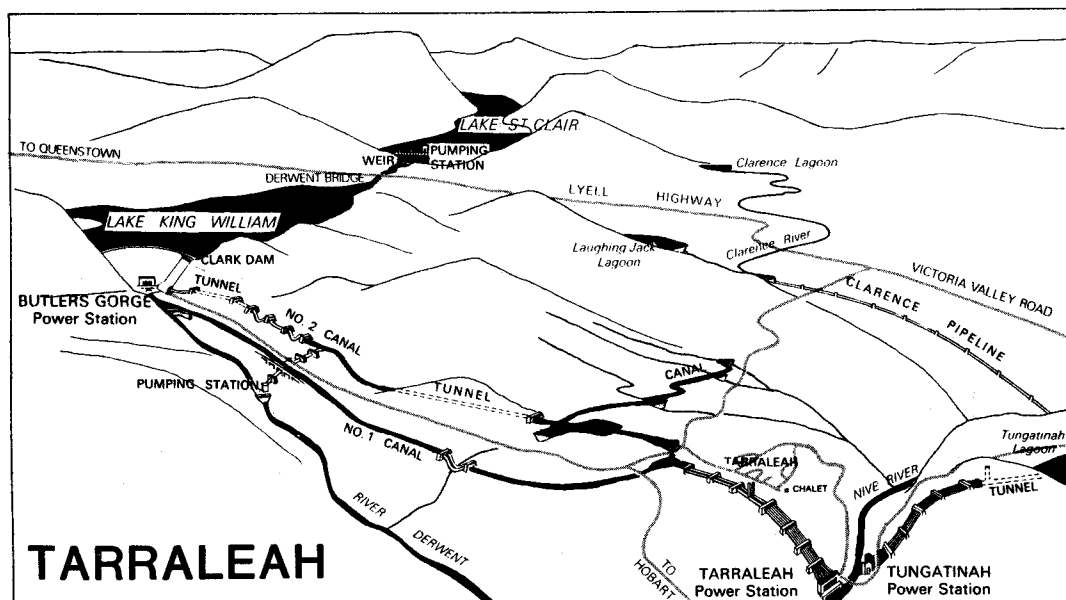
Introduction

Until 1971 Tasmania was unique among Australian states in that its electric power system was based almost entirely on hydro-electric installations, but in 1971 a thermal oil-fired station commenced operations at Bell Bay opening a new phase in the development of the generating system. Other Australian states rely principally on thermal plants while hydro-electric power, if available, is used only to supplement the basic supply. The Snowy Mountains Hydro-Electric Scheme, which feeds power to the Victorian and NSW grids, is not designed to cope with the base load demand in these states, its essential function being to provide the extra power necessary to meet peak loads, and also to supply water for irrigation purposes. The Tasmanian system, despite its lower installed generator capacity, produces more power than the Snowy Scheme. The total installed generator capacity of the Tasmanian electricity generating system at the end of 1981 was almost 1.8 million kW. Of this, 86 per cent (over 1.5 million kW) was contributed by an integrated hydro-electric network. The 240 000 kW oil-fired station at Bell Bay is available for use as required.

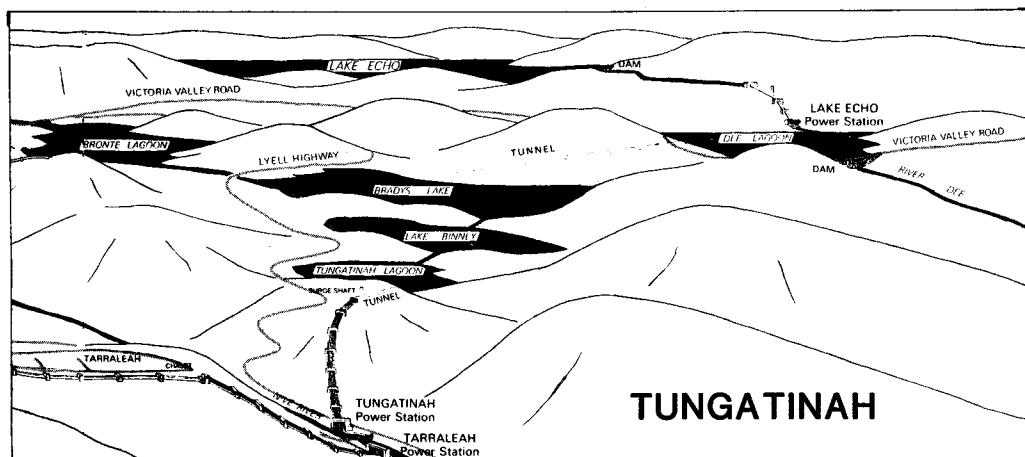


Tarraleah

This scheme was commenced in 1934 and completed in 1951. Lake St Clair was raised and Lake King William was created. Total capacity stands at 102 200 kW.

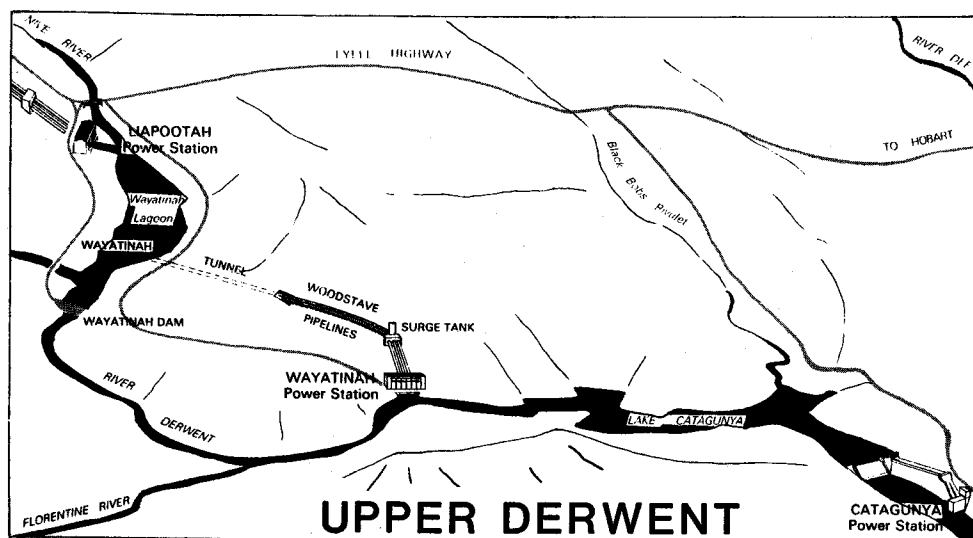
*Tungatinah — Lake Echo*

Uses the run-off from the area between Great Lake and Lake St Clair, Lake Echo being the major catchment. The scheme, completed in 1956 has a total capacity of 157 400 kW.



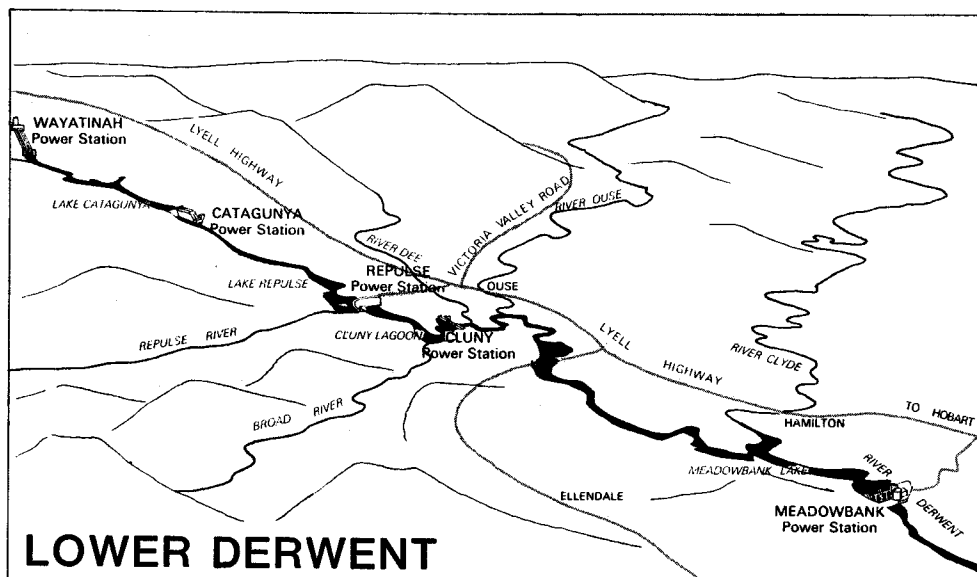
Upper Derwent

The Upper Derwent Development consists of three schemes — Liapootah, Wayatinah and Catagunya. The water used in these schemes has previously been used for power generation. Total capacity of these schemes is 169 950 kW.



Lower Derwent

The three stations in this development were built between 1961 and 1968 and exploit the remaining 125 m fall to sea level of the Derwent River. Total capacity of the scheme is 85 000 kW.

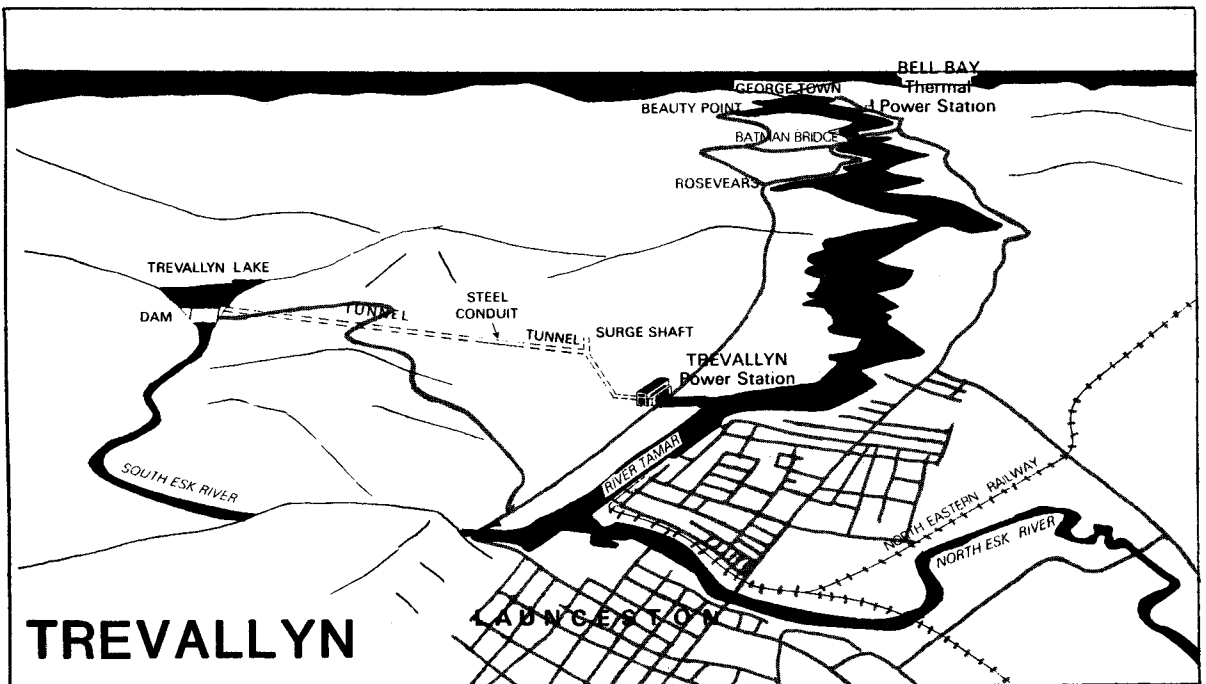
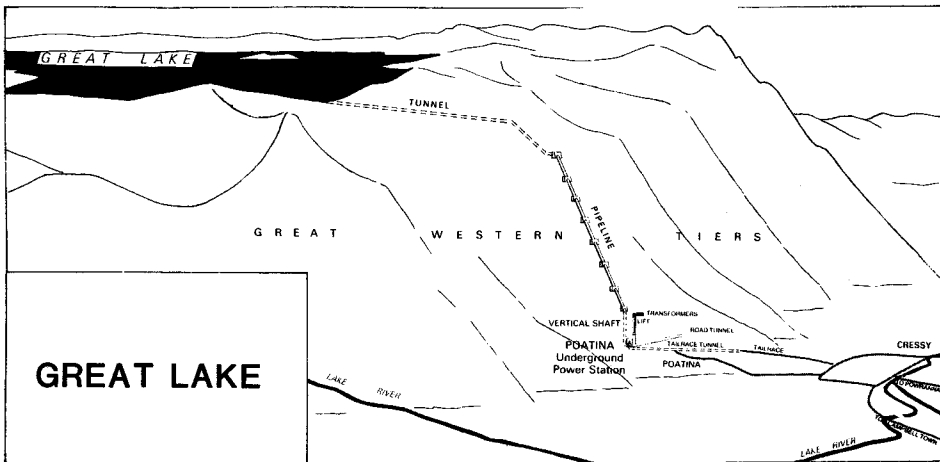


Great Lake — South Esk

Poatina station (300 000 kW) is the largest station in the Tasmanian Hydro-Electric system. The station uses the waters of the Great Lake which have been diverted into the South Esk River. Trevallyn station fed by the South Esk brings the scheme's installed capacity to 380 000 kW.

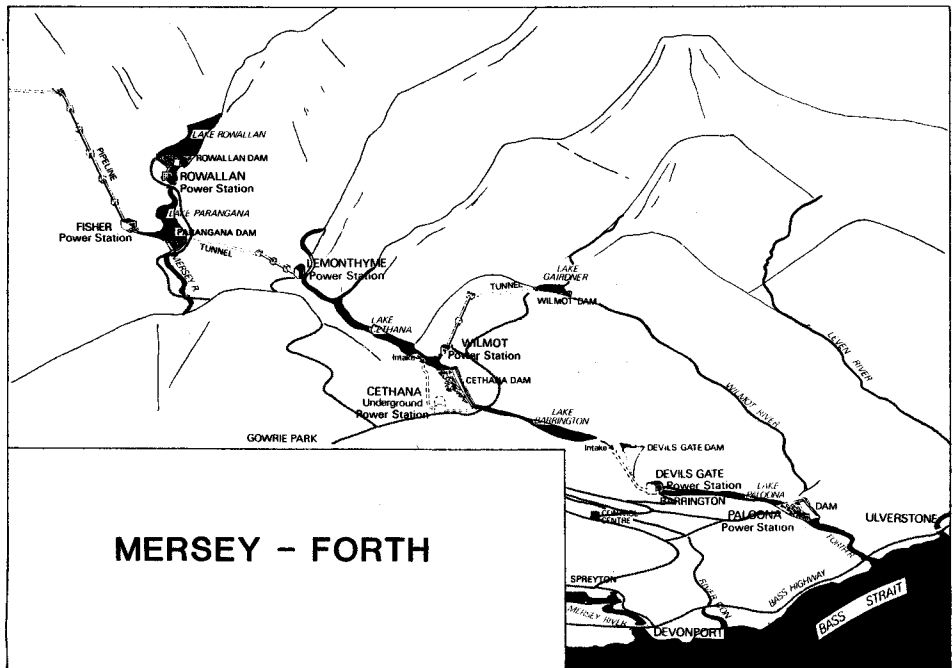
Bell Bay

Began operation in 1971 as the only non-hydro power station in the State grid. Total capacity now is 240 000 kW. Plans have been put forward to convert the station to coal firing using coal from the Fingal Valley.



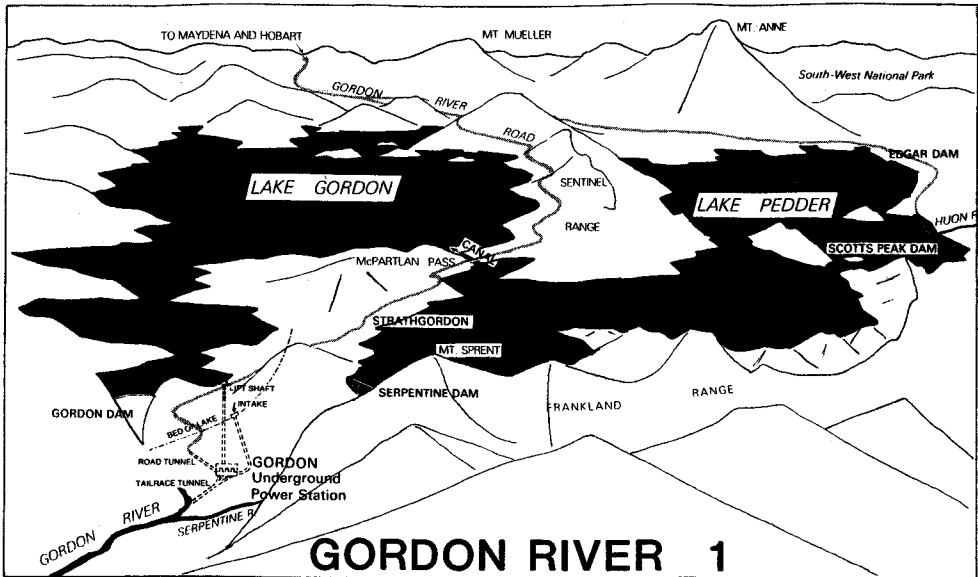
Mersey-Forth

This scheme completed in 1973 exploits the flows of the Fisher, Mersey, Wilmot and Forth rivers by a development comprising seven power stations, seven large dams, three major tunnels and associated works. Total capacity is 308 250 kW.



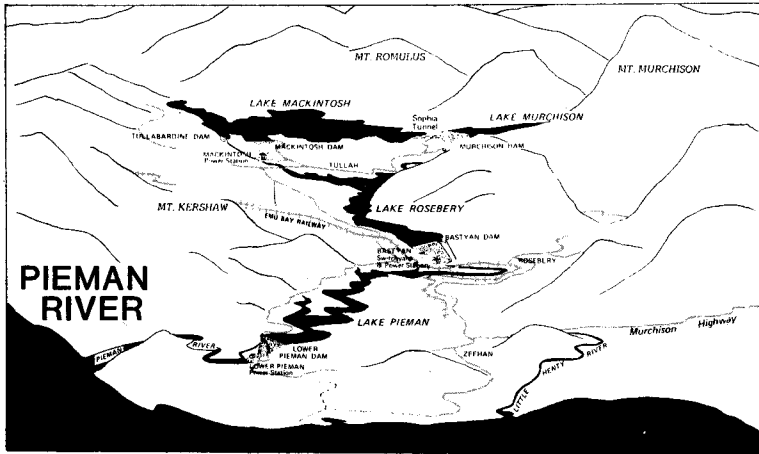
Gordon River

Uses the waters stored in two new lakes created for the scheme — Lake Pedder and Lake Gordon. These lakes form the largest fresh water storage in Australia. The Gordon power station currently has a generating capacity of 288 000 kW; progressively this will be raised to 720 000 kW by the installation of three more generators.



Pieman River

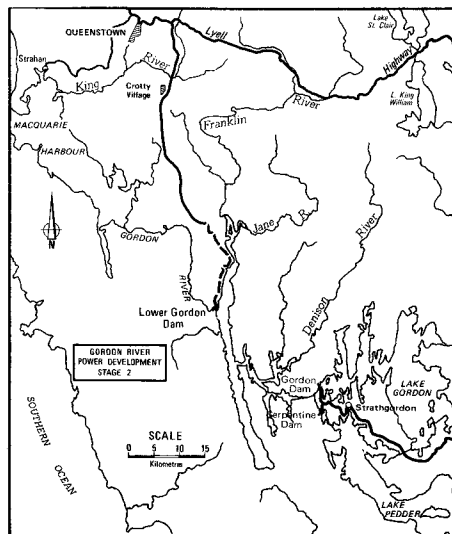
This scheme when completed will use the waters of the Pieman River system. Four lakes will be created to service three power stations. The Mackintosh power station of 79 900 kW was commissioned in 1982. When completed in 1986 the total capacity will be 418 500 kW.



Gordon River Power Development Stage 2

In June 1982 the Parliament of Tasmania passed legislation giving the HEC authority to construct the Gordon River Power Development Stage 2. This was to be the first part of a proposed integrated development which was to use the waters of the Franklin, Gordon and King Rivers.

The first scheme, approved by Parliament, consisted of a concrete faced rock filled dam 105 metres high on the Gordon River one kilometre from its junction with the Franklin River. A power station with installed capacity of 296 MW (172 MW average annual capacity) and ancillary structures was to be built. The scheme was to allow the waters of the Gordon Stage 1 to be used a second time as well as those of the Franklin River. Work on the project ceased after the High Court ruled on 1 July 1983 that work on the dam was invalidated by Federal legislation.



Tasmanian Electricity Generating System

Stations	Year of first generator commission	Static head (metres)	Generator capacity (kW)	Energy produced (mWh)
Completed Stations as at 30 June 1982				1981-82
Tarraleah	1938	299	90 000	589 862
Waddamana 'B' (a)	1944	344	48 000	5 247
Butlers Gorge	1951	56	12 200	73 377
King Island	1951	(b)	1 444	5 065
Tungatinah	1953	306	125 000	588 724
Trevallyn	1955	126	80 000	416 359
Lake Echo	1956	173	32 400	82 010
Wayatinah	1957	62	38 250	270 511
Liapootah	1960	110	83 700	471 375
Catagunya	1962	43	48 000	252 894
Poatina	1964	829	300 000	1 026 737
Tods Corner	1966	41	1 600	4 942
Meadowbank	1967	29	40 000	196 224
Cluny	1968	16	17 000	95 605
Repulse	1968	27	28 000	164 931
Rowallan	1968	49	10 450	48 142
Flinders Island	1968	(b)	400	1 027
Lemonthyme	1969	159	51 000	319 439
Devils Gate	1969	68	60 000	317 397
Wilmot	1971	251	30 600	136 305
Bell Bay (Thermal)	1971	(c)	240 000	426 876
Cethana	1971	99	85 000	443 400
Paloona	1972	31	28 000	142 325
Fisher	1973	649	43 200	241 746
Gordon (Stage 1)	1978	200	288 000	1 631 387
Mackintosh	1982	69	79 900	85 748
TOTAL	..	..	1 862 144	
Stations Under Construction				
Bastyan	1983	63	79 900	
Pieman	1986	94	231 000	
TOTAL	..	..	310 900	

(a) Reserve plant only.

(b) Diesel generators.

(c) Thermal oil-fired station; the second generator was installed in 1974.

Politics And The South-West

The 'cooling off' period called by the Premier, Mr Holgate, when he prorogued parliament did not see a cooling off of the debate over the Gordon-below-Franklin dam issue. In January the State Labor Party Caucus overturned its previous support for the Olga scheme and voted 15 - 5 for the Gordon-below-Franklin. While the State Labor Party was moving to support the dam its Federal counterpart was becoming increasingly hostile; the Federal ALP spokesman on Conservation, Mr Stewart West, attacked the decision of the State party.

Parliament resumed on 26 March 1982 after the three month prorogation. The Government sought to bring in legislation to enable the dam to go ahead but a motion of no-confidence was immediately proposed by Dr N. Sanders. After a bitter debate the Government was defeated. Labor rebels, Mrs M. Willey and Mr D. Lowe joined with the Australian Democrat Dr N. Sanders and the Liberal Party to vote for the motion of no-confidence.

The election campaign that followed centred around the dam issue. Though both major parties were officially committed to building the Gordon-below-Franklin dam, several Labor candidates publicly opposed it. The Liberal Party vote increased by 5 per

cent on the previous election, which gave it its first majority ever in the Tasmanian Parliament. The Labor vote slumped 17 per cent, and Dr N. Sanders and Mr D. Lowe were both returned. One of the first acts of the new government was to introduce legislation authorising the Gordon below Franklin scheme.

The Tasmanian Wilderness Society took action in the High Court in an attempt to forestall Federal Government approval for loan funds for the scheme. The court rejected this move. The Loans Council at its June meeting gave the go-ahead for the HEC to raise loan funds.

As work on the scheme commenced, conservationists drew up plans for protest action at the end of the year. International pressure on the issue began to be felt in Tasmania; twenty-four world scientists wrote to the Prime Minister, Mr Fraser, to urge him to intervene to stop the dam. The State Government sought to have the Federal Government withdraw its nomination of the South-West for the World Heritage List. This was rejected by the Federal Government.

In November the Senate Select Committee tabled its report on the South-West. The majority conclusions were to modify the HEC's forecasts of electricity demands and recommend that a decision on a major scheme whether hydro, thermal or interconnection with Victoria be delayed for three years. The committee also proposed that one or more small hydro-electric schemes be constructed to provide flexibility in power supply. It further proposed that investigations should be carried out on alternative electricity sources and energy conservation measures. The committee accepted the importance of the South-West area both as an archeological site and as a wilderness area. A minority report was presented by Tasmanian, Senator Brian Archer which agreed with the HEC's submission.

In November the Federal ALP caucus endorsed the earlier federal conference opposition to any dam in the South-West. In the Senate the Australian Democrats introduced a Bill designed to protect South-West Tasmania. The Federal Government continued to refuse to intervene. The scene was set for the protestors to make their point.

South-West Tasmania's Anti-Dam Blockade

On 14 December 1982 Tasmania's controversial South-West wilderness area was given World Heritage status by the World Heritage Committee in Paris. This was despite the fact that the State's Attorney-General, Mr Max Bingham, had flown to Paris on behalf of the State Government to lobby the Committee against placing the area on the list. The Tasmanian Wilderness Society (TWS) had planned the commencement of blockade action in the South-West to coincide with the expected listing announcement. The repercussions of events escalating after 14 December were felt immediately not only by the Tasmanian community, but the Australian community as a whole.

The blockade was the culmination of years of protest against the proposed Gordon-below-Franklin dam organised across the country by the TWS. On 28 November 1982 a pro-dam group, the Organisation for Tasmanian Development (OTD) was formed in Queenstown to show support for the Premier and the damming of the Gordon River. Two weeks later the OTD organised its first rally in Queenstown in which approximately 1 500 people participated. The first day of the TWS's long-planned blockade was claimed as a victory by both the TWS and the HEC. The HEC claimed the blockade was ineffectual; however, 53 people were arrested. Of this number, 47 were taken to Risdon prison for refusing to accept a bail condition that they not return and trespass again on HEC property. The blockade, before Christmas, proved to be a well-planned affair. Each of the parties involved (blockaders, police and media) were well-informed of movements before they happened. The atmosphere was relaxed and the blockade was a peaceful event. In a display of solidarity, Tasmanian politicians told Federal members to stay out of the South-West controversy. This attack was made on 21 December at a rally of 3 000 people in support of the Dam. By Christmas the total number of those arrested had risen to 202. The Director of the TWS, Dr. Bob Brown, spent Christmas 1982 in Risdon prison along with four colleagues. He then became a Member of Parliament due to Dr. Norm Sanders'

resignation and was also named 'Australian of the Year' by the Sydney based newspaper the *Australian*.

After resumption of HEC work on 4 January 1983 the TWS intensified its campaign and by mid-January the numbers arrested had grown by 270 to 472. No major scenes of violence between TWS members and either the police or HEC workers occurred. In early January two attacks had been made on the TWS headquarters at Strahan but no major damage had been sustained. On 13 January Dr. Bob Brown was attacked and bashed at Strahan by five youths who were subsequently charged. This act exemplifies the growing hostile attitude of the majority of West-Coasters to the conservationist, or 'greenie', brigade.

An important day for the conservationists was 14 January because for the first time a judge set aside the controversial bail conditions imposed on anti-damners by a Queenstown magistrate. The judge also released two Aborigines who had been held for four days in Risdon gaol without having been given the option of bail.

The Premier, Mr Gray, declared that the World Heritage listing allowed Tasmania to still retain its right to pursue further hydro-electric, mining and forestry developments in its World Heritage 'wilderness' area. He claimed the South-West blockaders were 'a ragbag collection of mainland unemployed', (*Examiner*, January 17 1983). This statement caused uproar among the anti-damners who claimed they came from all walks of life.

Meanwhile demonstrations both for and against the dam were being held around the State, and in the case of those against, around the country. Approximately 2 000 ventured to the Kelly Basin Road on the West Coast to protest against the Dam, whilst a day later in Burnie the OTD's rally supporting the dam attracted 3 000 people.

Australia's millionaire electronics businessman, Mr Dick Smith, flew his helicopter to the South-West to join the protest. He later offered \$1 million to anyone who could immediately stop construction of the dam. His offer was treated as outrageous by both major State political parties. Other Australians of note to come out against the dam included eminent historian Professor Manning Clark and many archaeologists such as Professor D. J. Mulvaney, Rhys Jones and Professor Jack Golson. The campaign against the dam was not confined to Australia. Celebrities such as Spike Milligan and botanist Professor David Bellamy were protesting against the flooding in London. Professor Bellamy flew to Tasmania in mid-January to be arrested in the blockade and spent the following four days in Risdon prison.

Possibly the most important day of the blockade campaign was 19 January for it was the day the Prime Minister, Mr Fraser, visited the South-West by helicopter and subsequently offered Premier Gray \$500 million. The money was offered to build an alternative to the Gordon-below-Franklin scheme but was immediately rejected by Mr Gray. Mr Fraser offered the money to cover the cost of building a 200 megawatt coal-fired power station and a 40 per cent subsidy on the price of coal, estimated at \$250 million over two years. Mr Fraser reaffirmed Federal Cabinet's decision of the previous week not to intervene in the South-West against the State's will. A few days later the Federal Opposition Leader, Mr Hayden, stated that a Federal Labor Government would use its legal and constitutional powers to stop the dam.

By the end of January more than 850 people had been arrested. On 3 February the Prime Minister, Mr Fraser, announced that a Federal election would be held on 5 March. This was the same day Mr Hayden resigned as Leader of the Opposition in favour of Mr Hawke. This move intensified speculation that the South-West dam would be stopped through a Federal Labor win in the election.

The blockaders decided to adopt 'guerilla tactics' in their campaign. This entailed more than the passive submissiveness adopted previously. At the end of February police evicted 77 conservationists camped on the Lower Gordon River below the part of the park vested in the HEC. The blockaders announced that they would take legal action against police who had evicted them. They also lodged Supreme Court writs against the State Government Minister for National Parks and Wildlife Service and the HEC.

The first day of March was declared as 'Green Day' by the TWS. Peaceful protests were held in Strahan, Hobart, Launceston, Melbourne, Sydney and Canberra. Many were protesting against more than 1 100 people being arrested in the wilderness area and more than 500 being gaoled. A record number of arrests (228) were registered as conservationists stepped up their campaign in line with 'Green Day'.

On 4 March the TWS called a one-week moratorium on action in the South-West which was based on an assumption of a Federal Labor Government being elected in the next day's election. Following the election and Labor's win, the TWS called a halt to the blockade and left only a watchdog camp on the West Coast in anticipation of a Federal Labor Government's successful termination of the scheme.

The 81-day blockade had seen 1 340 people arrested.

The new Prime Minister, Mr Hawke, committed the new Federal Government to stopping the dam in the South-West and compensating Tasmania for any losses. Mr Hawke made several offers to the State Government which rejected them. Mr Gray insisted that Mr Hawke visit the South-West before he entered into any negotiation. The stalemate was broken by the Federal Government when it gazetted regulations to protect the South-West; this set the stage for the High Court challenge.

Controversy raged over the use of RAAF planes by the Federal Attorney-General to photograph work on the dam. On the first day of sitting of the new Commonwealth Parliament, legislation was introduced to widen the Federal powers to preserve world heritage areas. Two court decisions went against the HEC in its legal battles with the conservationists over the blockade; a magistrate refused to continue hearing a trespass case as it involved a title of land and another magistrate dismissed a case of obstruction.

A discussion paper issued in April by Mr R. P. Rutherford and Mr M. E. Trethewey of the University of Tasmania put compensation for not going ahead with the dam at \$500 million, in current value terms. This figure was based on the acceptance of the HEC's demand forecasts. However the discussion paper went on to severely criticise HEC methodology. On interest rates the paper suggested that future real interest rates would be higher in the 1980's and beyond than they were in the 1970's. At times, because of unanticipated inflation, real interest rates during the 1970's were actually negative.

The HEC method of forecasting major industrial demand for electricity constituted 'A departure from any form of well defined statistical analysis'. The authors of the paper concluded that if the HEC had overestimated demand then an integrated thermal scheme would in fact be cheaper.

The paper also found that the method of accounting by the HEC inflates the bills of the general load consumer and has the effect of subsidising the industrial users. This was calculated at \$47.00 a quarter for the average household. Small businesses were claimed to be subsidising the big industrial users by \$25 million a year. The authors believe that this has the effect of destroying jobs in labour intensive small business in favour of highly capital intensive externally controlled large industries. This they suggest may, in part, account for Tasmania's position as Australia's economic backwater.

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CHAPTER 16

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Chapter 16

TRADE, DISTRIBUTION AND TOURISM

OVERSEAS AND INTERSTATE TRADE

Historical

The *Statistical Returns of Van Diemen's Land* and the *Statistics of Tasmania* provide a continuous series of total trade statistics dating from 1824 to 1909. Until the foundation of the Commonwealth in 1901, trade with other parts of Australia was recorded as originating from or being destined for 'British Colonies'; in other words, all Tasmanian sea trade was regarded as overseas. From Federation to 1909, statistics were collected and compiled by the newly formed federal Customs Department for *all* sea trade, but since 1910 only direct *overseas* trade has been recorded by Australian Customs. In an island state, it became apparent that statistics of overseas trade alone were inadequate to record economic activity and, from 1922-23, the Government Statistician collected and published details of interstate trade. The collection of these data, now undertaken independently by the State Office of the Australian Bureau of Statistics, depends primarily on documents made available by Tasmanian port authorities and Australian Customs. In brief, there is a *total* trade series (1824-1909), an *overseas* trade series (1910 to 1921-22) and a *total* trade series (1922-23 to today).

In the immediate post-war period, there was a marked expansion of commercial aviation; the freight being carried was a component of interstate trade and steps were taken to record it, the first published figures appearing for 1949-50. Thus, the total trade of Tasmania is now recorded in three categories: overseas, by sea; interstate by sea; interstate by air.

Values of Trade from 1824

Due to considerable and persistent changes in the purchasing power of money, it is extremely difficult to satisfactorily interpret any long-term statistical series expressed in money terms. Pre-1966 recorded figures have been converted to \$A by simply doubling the originals, *irrespective of their year of occurrence*, and no account has been taken of changes in exchange rates. Post 1966 figures similarly have not been adjusted to take account of changes in exchange rates.

The following table provides historical interest but is subject to all the disabilities (including changes in the value of Australian currency) associated with long-term money series. See Statistical Summary at the end of this book.

Total Value of Trade by Sea and Air: Historical Summary, Tasmania
(\$'000)

Year	Value of imports			Value of exports			Total
	Overseas	Interstate		Overseas (b)	Interstate (b)		
	Sea	Sea (a)	Air	Sea and air	Sea	Air	
1824	n.a.	n.a.	} n.a.	124	n.a.	n.a.	30
1860	1 686	450		2 136	1 544	380	1 924
1880	738	2 000		2 738	1 568	1 456	3 024
1900	1 402	2 746		4 148	3 078	2 144	5 222
1910	1 662	(c)		n.a.	1 040	(c)	n.a.

continued next page

Total Value of Trade by Sea and Air: Historical Summary, Tasmania
(S'000)—continued

Year	Value of imports				Value of exports					
	Overseas	Interstate		Total (a)	Overseas (b)	Interstate (b)		Total		
	Sea	Sea (a)	Air		Sea and air	Sea	Air			
1919-20	1 626	(c)	} n.a.	n.a.	4 022	(c)	} n.a.	n.a.		
1929-30	3 668	16 028		19 696	4 978	13 198		18 176		
1939-40	3 188	21 780		24 968	4 852	20 954		25 806		
1949-50	18 704	51 218	(d)	10 670	80 592	29 936	42 672	(d)	3 996	76 604
1959-60	27 606	130 014		19 210	176 830	47 730	137 530	20 818	206 078	
1969-70	46 998	257 441		20 551	324 989	143 470	286 083	26 287	455 840	
1979-80	179 780	935 584		53 481	1 168 845	646 827	767 974	32 141	1 446 942	
1980-81	172 456	973 685		60 922	1 207 063	658 013	829 076	45 171	1 532 261	

(a) Data for 1979-80 onwards are not directly comparable with data for previous years due to revisions to estimation procedures to overcome the inadequate documentation available for interstate imports by sea.

(b) Data for 1978-79 onwards are not directly comparable with data for previous years.

(c) Collection discontinued for period 1910 to 1921-22.

(d) First collected in 1949-50.

Definition of 'Overseas' and 'Interstate'

Statistics on Tasmania's overseas trade include details of goods landed directly from overseas ports and goods of Tasmanian origin exported directly or transhipped through other Australian States to overseas countries. Prior to 1 July 1978 overseas export statistics comprised details of goods exported overseas for which the export documentation was lodged with the *Bureau of Customs* in Tasmania. Accordingly, due to this change in the method of recording overseas exports, figures for 1978-79 and following years are not directly comparable with those for previous years.

Statistics of interstate trade include details of goods landed in or shipped from Australian states. In addition, details of goods imported from overseas through other Australian states are included provided that the overseas import documentation has been lodged with customs in another Australian state. They do not include details of exports transhipped through Australian States.

By way of example, a new Japanese car transhipped in Melbourne and discharged in Tasmania is classified as an item of interstate trade. Victoria, not Japan, is classified as the place of origin, provided that the overseas import document has been lodged with Customs in Victoria.

However, import and export details of motor cars and commercial vehicles include tourist vehicles entering and leaving the State. The following table shows details for recent years.

Motor Vehicles (a): Value of Imports and Exports, Tasmania
(S'000)

Particulars	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Imports—						
Interstate—						
New vehicles	62 644	68 041	75 608	75 600	81 368	74 951
Tourist vehicles	35 379	36 462	40 013	43 612	53 392	63 181
Overseas	6 144	7 737	9 298	10 430	12 064	16 408
Total imports	104 167	112 140	124 919	129 642	146 824	154 540

continued next page

Motor Vehicles (a): Value of Imports and Exports, Tasmania
 (\$'000)—*continued*

Particulars	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Exports—						
Interstate—						
New vehicles	n.a.	n.a.	n.a.	644	1 178	2 162
Tourist vehicles	34 854	36 651	41 427	43 481	53 541	65 041
Total exports	n.a.	n.a.	n.a.	44 125	54 718	67 203

(a) Excludes the values of used vehicles which cannot be separately identified.

Source of Trade Statistics

Overseas trade statistics are compiled from documents obtained under the Federal *Customs Act* 1901 and supplied to the Australian Bureau of Statistics by the Australian Customs. *Interstate sea* trade statistics are compiled from documents required under the authority of the *Marine Act* 1976 and made available to the Tasmanian Office of the ABS by the various port authorities. Statistics of *interstate air* trade are compiled from returns furnished direct to the Tasmanian Office of the ABS by all those who use this medium for the transportation of goods in commercial or industrial operations.

Values

The cost of importing goods into any country will theoretically contain four elements: (i) the 'original' price at door of factory, warehouse, etc.; (ii) the cost of delivering goods to the ship 'free on board'; (iii) sea freight and associated charges between ports; and (iv) cost of delivery from port to buyer.

Trade statistics base values on the first two elements but exclude the third and fourth as set out in the following definitions:

Overseas Exports: Goods sold to overseas buyers before export are valued at the 'free-on-board' (f.o.b.) port of shipment equivalent of the actual price paid to the exporter. Goods shipped on consignment are valued at the f.o.b. port of shipment equivalent of the current price offering for similar goods of Tasmanian origin in the principal markets of the country to which they are despatched for sale.

Overseas Imports: The recorded value for overseas imports is the 'value for duty' as required for Customs purposes. On 1 July 1976 Australia adopted the internationally recognised Brussels Definition of Value on a f.o.b. basis (i.e. charges and expenses involved in delivering the goods from the place of exportation to the place of introduction in Tasmania, are excluded). The value for duty is based on the normal price (i.e. the price the goods would fetch at the time when duty becomes payable on a sale in the open market between a buyer and a seller independent of each other). In practice, the basis for valuation is generally taken to be the invoice price subject to certain safeguards and adjustments where necessary. This new basis of valuation differs from that used prior to July 1976 which, broadly, was based on the higher of actual selling price or current domestic value (in the country of export) plus charges involved in placing the goods free-on-board the vessel at the port of export. Because of the change in the basis of valuation the recorded overseas import figures from 1 July 1976 are not directly comparable with those for previous years. It is estimated that if the previous basis of valuation had continued, the value of total overseas imports would have been about 2 per cent higher than the recorded values on the new basis.

Interstate Imports and Exports: These are valued at the f.o.b. port of shipment equivalent of the actual price at which the goods were sold.

Tasmanian Ports

Although there are seven port authorities (usually called marine boards) in Tasmania, overseas trade is restricted to the ports of Hobart, Launceston, Burnie, Devonport and Stanley. (Exports of iron ore from Port Latta are credited to Stanley and exports of woodchips from Spring Bay are credited to Hobart.) The names of ports in subsequent tables refer to the cities or towns in which the controlling port authorities are located. Thus 'Hobart' includes Port Huon, Spring Bay, Howden and Strahan; 'Launceston'

includes Bell Bay, Inspection Head and Long Reach; 'Stanley' includes Port Latta; 'Currie' includes Naracoopa and Grassy; and 'Lady Barron' includes Whitemark.

This chapter deals only with the imports and exports passing through these ports. For a description of the major ports and for the financial operations of the port authorities, see Chapter 17.

Total Trade of Tasmania

The following table shows Tasmanian total trade and its components in recent years. It will be observed that interstate trade is the major element both in imports and exports (but imports include some goods transhipped through other Australian ports—see definitions above).

Total Trade, Tasmania
(\$'000)

Year	Imports				Exports (a)			
	Overseas	Interstate		Total	Overseas	Interstate		Total
	By sea	By sea(b)	Air	imports(b)	By sea and air	By sea	By air	exports
1975-76	76 262	503 497	27 882	607 641	250 580	441 391	36 280	728 251
1976-77	94 622	564 231	30 909	689 762	338 657	485 850	35 160	859 667
1977-78	115 778	594 793	39 388	749 960	381 942	606 896	38 206	1 027 044
1978-79	140 652	621 598	74 578	836 828	513 286	627 186	39 727	1 180 199
1979-80	199 780	935 584	53 481	1 168 845	646 827	772 531	32 141	1 451 499
1980-81	172 456	973 685	60 922	1 207 063	658 013	837 042	45 171	1 540 226

(a) From 1978-79, data for overseas exports are not directly comparable with data for earlier years.

(b) Data for 1979-80 onwards are not directly comparable with data for earlier years.

The next table shows the balance of trade (excess of exports over imports):

Balance of Trade (Sea and Air), Tasmania

Year	Balance of trade (excess of exports)		Year	Balance of trade (excess of exports)	
	Total (\$'000)	Per head of mean population (\$)		Total (\$'000)	Per head of mean population (\$)
1975-76	120 610	297	1978-79	343 371	819
1976-77	169 905	411	1979-80	282 654	669
1977-78	277 084	665	1980-81	333 163	783

(a) Data for 1979-80 onwards are not directly comparable with data for earlier years.

Overseas Trade by Sea

Details of Tasmania's trade with overseas countries for the past six years are shown in the following table:

Total Value of Trade by Sea With Overseas Countries, Tasmania
(\$'000)

Year	Value of imports from—				Value of exports to (a)—			
	Japan	U.S.A.	Canada	Other	Japan	U.S.A.	Malaysia	Other
1975-76	11 836	10 039	8 131	46 256	110 670	34 339	5 340	100 231
1976-77	15 721	13 631	9 229	56 041	148 191	43 593	14 389	132 484
1977-78	17 627	18 103	12 225	67 823	155 385	48 488	30 595	147 474
1978-79 (a) ..	23 449	18 759	13 724	84 721	163 298	64 822	53 229	231 937
1979-80	34 959	24 591	17 075	103 156	217 795	71 935	64 765	292 333
1980-81	33 891	28 087	19 020	91 457	255 572	66 139	66 541	269 762

(a) From 1978-79, data for exports are not directly comparable with data for earlier years.

In 1980-81 Japan was Tasmania's major overseas supplier of imports, followed by the United States of America, Canada, New Zealand and the United Kingdom.

Trade with Selected Countries

The principal countries of origin, together with values (in \$m) for overseas imports shipped direct to Tasmania in 1980-81 were: Japan, 33.9; United States of America, 28.1; Canada, 19.0; New Zealand, 16.6; United Kingdom, 15.5; USSR, 8.9; and China (Taiwan Province only), 8.5. The principal countries of destination for overseas exports from Tasmania (value in \$m) were: Japan, 255.6; Malaysia, 66.5; United States of America, 66.1; Indonesia, 36.9; Federal Republic of Germany, 28.2; and Hong Kong, 24.1.

The following table shows the trade of Tasmania with selected overseas countries. It should be noted that some goods are received from overseas countries by transshipment through other Australian states; no data are available on such transactions.

Trade With Overseas Countries, Tasmania
(\$'000)

Country of Origin or Destination	Imports			Exports		
	1978-79	1979-80	1980-81	1978-79	1979-80	1980-81
Association of South East Asian Nations (ASEAN)—						
Indonesia	34	94	229	19 277	24 758	36 938
Malaysia	4 050	3 727	4 121	53 229	64 765	66 541
Philippines	96	377	246	7 165	8 852	6 084
Singapore, Republic of	469	3 856	1 070	8 617	14 985	18 314
Thailand	477	332	513	13 762	16 410	16 964
Total ASEAN	5 126	8 386	6 180	102 050	129 769	144 841
European Economic Community (EEC)—						
Belgium—Luxembourg	315	365	373	16 804	24 548	16 179
Denmark	131	252	1 004	513	437	327
France	2 581	1 268	1 599	7 587	8 706	8 604
Germany, Federal Republic of	5 612	6 875	5 694	23 492	24 125	28 184
Greece	2	13	36	462	1 274	1 084
Ireland	232	390	112	256	2	47
Italy	7 632	1 484	2 597	4 971	5 325	5 630
Netherlands	3 579	5 052	6 529	2 854	6 216	4 779
United Kingdom	11 930	15 805	15 513	14 843	29 287	16 413
Total EEC	32 015	31 505	33 456	71 783	99 921	81 247
Other Major Trading Partners—						
Canada	13 724	17 075	19 020	797	3 989	1 079
China—excluding Taiwan province	402	738	1 316	14 591	15 403	2 085
Taiwan province	6 683	6 841	8 502	14 717	12 701	16 500
Hong Kong	1 976	2 508	1 885	12 191	16 107	24 147
India	348	341	264	8 950	17 474	9 015
Iran	11	2 274	—	4 573	3 362	1 919
Japan	23 449	34 959	33 891	163 298	217 795	255 572
Korea, Republic of	198	247	2 641	5 127	10 714	5 893
Nauru	4 341	1 418	3 302	4	1	1
New Zealand	14 844	19 722	16 565	8 523	8 760	11 330

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TRADE, DISTRIBUTION AND TOURISM

Trade With Overseas Countries, Tasmania
(\$'000)—continued

Country of Origin or Destination	Imports			Exports		
	1978-79	1979-80	1980-81	1978-79	1979-80	1980-81
Norway	1 224	3 119	2 604	3 085	3 417	1 524
Papua New Guinea	2 901	—	—	2 449	2 385	3 108
Poland	86	3 049	349	3 235	3 044	4 490
Qatar	—	—	—	217	11	1 925
South Africa	458	569	1 247	840	1 399	1 775
Sweden	3 920	5 597	4 004	5 626	5 461	6 099
United States of America	18 759	24 591	28 087	64 822	71 935	66 139
USSR	11	31	32	6 900	1 538	2 962
Other Countries	10 090	16 782	8 931	19 467	21 639	16 282
Unknown	—	—	—	40	—	81
Australia (re-imported)	87	30	179	—	—	—
Total overseas trade	140 652	179 780	172 456	513 286	646 827	658 013

(a) Data for 1978-79 are not directly comparable with data for earlier years.

The following table compares Australia's total overseas imports and exports with the corresponding values for Tasmania; by using a per capita comparison, certain conclusions can be drawn about the relative importance of Tasmania's overseas exports.

Value of Overseas Trade: Tasmania and Australia

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81
<i>Imports</i>					
Australia—Total \$'000	10 410 644	r 11 168 943	r 13 751 514	16 217 527	18 964 604
Per head \$	r 737.8	r 782.2	r 952.7	1 110.9	1 280.7
Tasmania—Total \$'000	94 622	115 778	140 652	179 780	172 456
Per head \$	r 229.1	r 278.8	r 336.9	426.9	405.5
<i>Exports (a)</i>					
Australia—Total \$'000	11 651 591	r 12 269 681	r 14 240 865	18 870 917	19 176 955
Per head \$	r 825.7	r 859.2	r 986.6	1 292.6	1 295.0
Tasmania—Total	338 657	381 942	513 286	646 827	658 013
Per head \$	r 819.8	r 919.7	r 1 229.4	1 536.0	1 547.2

(a) From 1978-79, data for exports from Tasmania are not directly comparable with data for earlier years.

The relatively low value of overseas imports per head of Tasmania's mean population is due largely to the transshipment of goods imported from overseas through other Australian ports. However, Tasmania has a healthy balance of total trade. As shown in an earlier table, the balance of trade (excess of exports over imports) in 1980-81 was \$765 per head of mean population. The export comparisons *per head* of Australian and Tasmanian mean populations suggest that the State plays an important role as an earner of export income for Australia.

Imports of Selected Commodities

The next table shows the value of the selected commodities imported into Tasmania by sea and air for a three-year period:

Value of Imports of Selected Commodities by Sea and Air, Tasmania (a)
(*\$'000*)

<i>Commodity</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Cattle	81	359	222
Sheep	74	164	173
Pigs	28	13	5
Other animals	6	20	15
Wheat	10 376	10 077	13 457
Gypsum	139	607	404
Limestone	69	27	—
Asphalt bitumen and pitch	885	2 203	1 036
Ores and concentrates and metal scrap	91 638	88 208	77 885
Coal and briquettes	1 244	664	400
Coke of coal	6 764	6 756	6 452
Motor spirit	42 839	68 460	82 815
Aviation kerosene	4 059	8 066	9 796
Power and lighting kerosene	742	1 075	474
Auto distillate	22 097	44 229	58 905
Industrial diesel fuel	4 662	9 935	4 315
Furnace fuel	15 117	36 721	32 285
Light heating oils	6 923	10 029	4 260
Bitumen feedstock	3 119	4 933	4 172
Caustic soda	2 577	4 205	4 039
Explosives	1 802	3 069	3 059
Iron and steel	18 148	22 877	22 473
Lead	627	551	289
New passenger motor vehicles	58 686	61 145	61 129
New commercial vehicles	27 295	32 279	30 228
All other merchandise commodities	468 774	697 420	724 269
Total merchandise commodities	788 771	1 114 093	1 142 555
Non-merchandise commodities—			
Motor vehicles (passengers' personal effects)	43 844	53 581	63 272
Other Non-merchandise	4 214	1 170	1 236
Total imports	836 829	1 168 845	1 207 063

(a) Only a restricted range of items has been included due to coverage problems relating to interstate imports by sea.

The table that follows shows the quantities of the selected commodities imported and has been compiled, as far as is practicable, to match the preceding table of values.

Quantity of Imports of Selected Commodities by Sea and Air, Tasmania (a)

<i>Commodity</i>	<i>Unit of Quantity</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Cattle	no.	117	225	301
Sheep	no.	645	1 905	4 488
Pigs	no.	222	38	19
Wheat	t	93 078	77 065	90 303
Gypsum	t	9 713	16 560	2 449
Limestone	t	25 627	15 906	—
Asphalt bitumen and pitch	t	4 227	13 267	6 139
Ores and concentrates and metal scrap	t	942 692	889 284	745 747
Coal and briquettes	t	40 119	18 866	9 635
Coke of coal	t	108 120	114 921	100 272
Motor spirit	'000 L	428 151	368 177	368 976
Aviation kerosene	'000 L	37 906	34 319	34 936
Power and lighting kerosene	'000 L	6 731	4 561	1 674
Automotive distillate	'000 L	202 355	199 963	222 198
Industrial diesel fuel	'000 L	44 984	48 169	17 128
Furnace fuel	'000 L	159 285	260 854	194 369
Light heating oils	'000 L	57 121	41 998	14 792
Bitumen feedstock	'000 L	23 055	31 357	22 309
Caustic soda	t	8 642	13 816	13 187
Lead	t	953	673	424

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Quantity of Imports of Selected Commodities by Sea and Air, Tasmania (a)—continued

Commodity	Unit of Quantity	1978-79	1979-80	1980-81
New passenger motor vehicles	no.	13 824	13 779	13 021
New commercial vehicles	no.	3 283	3 142	4 033
Non-merchandise—				
Motor vehicles (passengers personal effects)	no.	18 432	18 525	20 932

(a) Only a restricted range of items has been included due to coverage problems relating to interstate imports by sea.

Imports from Principal Overseas Countries

The next table shows the value of imports, by main commodities, from principal overseas countries. In 1980-81 Japan was Tasmania's principal source of overseas imports. In this year the value of imports from Japan accounted for 20 per cent of the total value of \$172.4 m of imports from overseas countries and the United States of America accounted for 16 per cent.

The United Kingdom was Tasmania's main trading partner for many years. However, Tasmania's trade with the UK has declined markedly in recent years, especially since the UK joined the European Economic Community in 1972. The UK was Tasmania's major overseas source of imports (based on value) up to 1971-72 and the major country of destination for exports up to 1967-68. In 1980-81, the UK had dropped to Tasmania's fifth most important overseas source of imports (based on value) and the seventh most important country of destination for exports.

Value of Imports from Principal Overseas Countries, Tasmania (\$'000)

Commodity	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
<i>Japan</i>						
Chemicals	1 160	2 469	3 362	3 999	2 280	3 175
Commercial vehicles	2 456	3 454	3 877	4 896	5 252	9 042
Machinery	2 095	2 048	2 438	6 399	4 170	10 498
Motor cycles	583	753	760	733	935	1 538
Passenger motor vehicles	2 397	3 129	3 645	4 223	5 362	6 565
Ships and boats (a)	—	—	—	—	14 455	—
Textiles	2 319	2 617	2 104	1 586	1 190	404
Other (b)	826	1 251	1 441	1 613	1 315	2 669
Total	11 836	15 721	17 627	23 449	34 959	33 891
<i>United States of America</i>						
Chemicals	729	1 147	862	1 051	1 801	330
Clays	685	1 165	341	1 161	821	1 466
Coke of coal	148	596	546	164	755	552
Machinery	2 503	2 781	5 998	6 073	6 244	8 978
Petroleum coke	2 858	3 833	6 836	5 201	6 159	7 645
Scientific equipment	93	104	83	421	236	647
Textiles	403	655	625	860	1 228	1 345
Transport equipment	258	428	277	637	785	1 138
Wood pulp	1 372	1 474	595	1 264	3 487	2 887
Other (b)	990	1 448	1 940	1 927	3 075	3 099
Total	10 039	13 631	18 103	18 759	24 591	28 087

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Value of Imports from Principal Overseas Countries, Tasmania
(S'000)—*continued*

<i>Commodity</i>	<i>1975-76</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
<i>Canada</i>						
Asbestos	8	105	316	222	294	374
Chemicals	23	25	21	944	749	2 141
Machinery	725	377	1 320	1 192	656	1 163
Textiles	107	140	201	609	1 111	626
Wood pulp	6 993	7 964	9 628	10 259	13 177	14 166
Other (b)	275	618	739	498	1 088	550
Total	8 131	9 229	12 225	13 724	17 075	19 020
<i>New Zealand</i>						
Food and beverages	235	432	813	962	842	420
Machinery	385	375	629	678	699	1 089
Metal manufactures	66	67	63	210	327	571
Paper and paper board	1 958	1 811	2 574	3 029	1 471	1 181
Textiles	422	285	189	259	147	261
Wood pulp	6 150	5 349	6 531	7 427	14 462	10 640
Wool	482	658	1 088	851	708	725
Other (b)	484	520	915	1 428	1 066	1 678
Total	10 182	9 497	12 802	14 844	19 722	16 565
<i>United Kingdom</i>						
Antiques	299	446	448	363	759	880
Chemicals	510	727	1 090	855	1 695	2 522
Food and beverages	358	579	688	917	600	430
Machinery	3 130	2 371	2 991	2 653	4 329	3 843
Metal manufactures	611	933	946	1 642	916	954
Printed matter	789	466	657	686	1 029	803
Textiles	934	1 327	1 917	2 001	1 690	1 370
Other (b)	1 981	2 404	3 934	2 813	4 787	4 711
Total	8 612	9 253	12 671	11 930	15 805	15 513

(a) Trawlers and other fishing vessels imported for temporary operations in Tasmanian waters.

(b) Includes value of items not available for separate publication.

Exports of Principal Commodities

The following table shows the value of principal commodities exported (interstate and overseas) from Tasmania by sea and air:

Exports of Principal Commodities by Sea and Air: Values, Tasmania
(S'000)

<i>Commodity</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Butter (including butter oil)	3 146	4 343	2 703
Cheese	18 247	17 128	22 414
Fish crustaceans and molluscs	12 987	19 393	25 231
Fruit—Apples (fresh)	11 327	13 506	12 004
Juices	1 282	1 760	1 697
Other	3 501	2 978	3 630
Hides and skins (excluding fur skins)	10 657	11 374	6 551
Hops	2 744	2 399	3 962
Live animals	16 100	16 872	14 806
Machinery	10 980	8 946	10 745
Meat—Beef and veal	30 718	34 651	27 555
Lamb and mutton	5 032	5 345	6 903
Other	2 313	1 674	1 432
Metals refined—Cadmium	2 956	3 156	2 780
Zinc	122 263	127 264	135 276

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Exports of Principal Commodities by Sea and Air: Values, Tasmania
(S'000)—*continued*

<i>Commodity</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Ores and concentrates—Copper	20 487	35 190	40 628
Iron	52 246	46 626	46 728
Lead	23 954	52 969	26 114
Tin	71 137	78 918	70 189
Tungsten	31 113	29 775	37 568
Tallow	5 253	3 974	3 119
Textile yarn, fabrics and made-up articles	43 815	37 184	45 047
Timber	38 609	88 238	85 254
Vegetables, fresh and preserved	46 125	53 916	67 608
Wool, greasy	38 756	36 630	48 422
Commodities not available for publication (a)	466 542	574 691	638 838
All other merchandise	42 998	r 82 739	77 863
Total merchandise	1 135 289	r 1 391 639	1 465 067
Non-merchandise—			
Motor vehicles (b)	43 488	53 541	65 041
Other	1 413	6 319	10 118
Total	1 180 199	r 1 451 499	1 540 226

(a) Commodities comprising this item are: aluminium, alumina, beadings and mouldings, paper, hard-board, cement, ferro-manganese, silicon-manganese, confectionery, cocoa and chocolate, food beverages, paper pulp, metal scrap, calcium carbide, titanium oxides, plywood, rutile, zirconium, particle board, asbestos-cement articles, ferro-silicon and woodchips.

(b) Mainly tourist and other motor vehicles exported as personal effects.

The next table shows the quantities of the principal commodities exported and has been compiled, as far as possible, to match the preceding table of values:

Exports of Principal Commodities by Sea and Air: Quantities, Tasmania

<i>Commodity (a)</i>	<i>Unit of quantity</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Butter (including butter oil)	t	2 561	2 871	1 510
Cheese	t	16 516	12 188	13 302
Fish—Abalone	t	1 268	1 351	1 812
Rock lobster	t	734	612	683
Other	t	n.a.	n.a.	486
Fruit—Apples (fresh)	t	39 005	44 538	38 558
Juices and syrups	'000 L	935	1 024	1 164
Other	t	7 791	5 731	6 497
Hides and skins (cattle, calf and sheep)	t	8 576	6 853	6 561
Hops	t	1 270	957	1 316
Live animals—Cattle	No.	32 546	21 484	26 291
Sheep	No.	474 801	349 053	234 542
Meat—Beef and veal	t	18 977	15 662	13 367
Lamb and mutton	t	4 186	4 370	5 262
Pork	t	222	200	143
Other	t	1 626	872	944
Metals, refined—Cadmium	t	730	649	662
Zinc	t	214 242	185 327	194 115
Motor cars and commercial vehicles (b)	No.	18 269	18 426	21 537
Ores and concentrates—Copper	t	61 467	71 609	78 444
Iron	'000 t	2 418	1 960	2 101
Lead	t	43 806	42 990	27 534
Tin	t	14 486	13 874	14 109
Tungsten	t	3 115	3 253	3 940
Tallow	t	11 750	7 841	7 643
Timber	M ³	238 135	291 453	265 488
Vegetables—Fresh	t	17 071	13 083	23 615
Preserved	t	89 253	99 846	108 613
Wool, greasy	t	16 306	13 213	16 356

(a) Principal commodities not available for publication comprise: aluminium, alumina, hardboard, cement, ferro-manganese, silicon-manganese, confectionery, cocoa and chocolate, food beverages, paper-pulp, metal scrap, calcium carbide, titanium oxides, plywood, rutile, zirconium, particle board, asbestos-cement articles, ferro-silicon and woodchips.

(b) Mainly tourist and other motor vehicles exported as personal effects.

The following table shows, in summary form, total exports of some important commodities for selected years since 1939-40:

Exports of Selected Commodities by Sea and Air, Tasmania

Commodity	Unit of quantity	1939-40	1949-50	1959-60	1969-70	1979-80 (a)	1980-81
<i>Quantity</i>							
Apples and pears, fresh ..	t	74 373	56 911	80 683	109 384	45 467	39 932
Butter (including butter oil)	t	2 816	2 179	7 864	12 611	2 871	1 510
Hops	t	719	802	1 340	1 368	957	1 316
Meat, fresh, chilled or frozen	t	2 534	957	9 225	17 048	20 446	19 406
Ores and concentrates	'000 t	137	6	28	2 175	(b)2 092	(b)2 225
Timber, dressed and undressed	'000m ³	120	148	178	207	291	265
Wool, greasy	t	5 110	5 228	12 690	16 513	13 213	16 406
Zinc, refined	t	72 047	81 998	115 680	163 847	185 327	194 115
<i>Value (\$'000)</i>							
Apples and pears, fresh		2 270	4 348	9 490	14 905	13 828	12 467
Butter (including butter oil)		742	1 277	5 390	6 950	4 343	2 703
Meat, fresh, chilled or frozen		310	312	3 801	11 774	40 183	35 330
Ores and concentrates—Copper		—	2	40	8 369	35 190	40 628
Iron		—	—	—	25 286	46 626	46 728
Lead		595	386	2 956	7 358	52 969	26 144
Tin		688	723	1 507	16 207	78 918	70 189
Textile yarn and fabrics		2 674	5 540	17 524	27 784	37 184	45 047
Timber, dressed and undressed		1 238	2 930	8 952	16 238	88 238	85 254
Wool, greasy		1 376	6 202	15 254	17 821	36 630	48 422
Zinc, refined		2 856	9 964	22 922	42 625	127 264	135 276

(a) From 1978-79, data are not directly comparable with those for earlier years.

(b) Excludes details of some items not available for separate publication.

Exports to Principal Overseas Countries

Details for commodities exported to principal overseas countries are given in the next table:

Exports to Principal Overseas Countries, Tasmania (a)

Exports to Principal Overseas Countries, Eastward (%)							
Commodity	Unit of Quantity	Quantity			Value (\$'000)		
		1978-79	1979-80	1980-81	1978-79	1979-80	1980-81
Japan							
Abalone	t	912	841	984	4 757	6 229	9 383
Cheese	t	4 387	1 965	874	4 512	2 403	1 386
Ferro-alloys	t	4 829	—	2 000	1 944	—	908
Meat—Beef and veal	t	2 979	3 434	3 701	4 888	9 201	8 664
Mutton	t	2 867	1 852	2 442	3 472	2 070	2 918
Other	t	217	792	228	398	1 251	490
Milk, dried	t	—	—	625	—	—	809
Onions, fresh	t	1 431	691	3 335	295	125	896
Ores and concentrates—							
Copper	t	40 629	42 185	63 337	13 551	18 737	33 230
Iron	'000 t	2 414	1 880	2 014	52 040	44 699	44 460
Tungsten	t	100	426	396	959	3 126	3 737

continued next page

Exports to Principal Overseas Countries, Tasmania (a)—continued

Commodity	Unit of Quantity	Quantity			Value (\$'000)		
		1978-79	1979-80	1980-81	1978-79	1979-80	1980-81
Japan							
Ships and boats (a)	no.	—	24	5	—	14 062	3
Wool, greasy	t	3 024	1 747	2 550	7 363	5 253	7 528
Restricted items (b) .....	..	n.a.	n.a.	n.a.	63 036	102 478	137 440
Other .....	..	n.a.	n.a.	n.a.	6 085	8 161	3 723
Total .....	..	n.a.	n.a.	n.a.	163 298	217 795	255 572
Malaysia							
Apples, fresh or chilled	t	308	69	971	106	37	435
Meat, fresh or frozen	t	122	218	333	121	258	547
Paper	t	4 212	4 325	4 810	1 765	2 376	3 195
Tin concentrates	t	9 285	8 871	10 260	47 056	57 408	56 354
Zinc refined	t	3 670	2 984	4 646	2 174	2 051	3 148
Restricted items (b) .....	..	n.a.	n.a.	n.a.	633	1 252	1 964
Other .....	..	n.a.	n.a.	n.a.	1 373	1 384	898
Total .....	..	n.a.	n.a.	n.a.	53 228	64 765	66 541
United States of America							
Abalone	t	30	87	171	200	726	1 826
Beef and veal	t	10 653	9 496	7 547	19 793	19 698	14 447
Cadmium	t	243	197	249	1 107	1 064	972
Casein	t	326	409	388	527	927	1 310
Cheese	t	3 074	1 365	2 026	4 348	2 358	3 610
Ferro-alloys	t	18 809	16 546	22 851	4 168	4 105	6 775
Lead concentrates	t	16 910	9 282	6 795	8 915	17 446	8 796
Machinery .....	..	n.a.	n.a.	n.a.	319	1 613	2 052
Rock-lobster	t	65	100	114	750	1 548	1 425
Wool, greasy	t	722	307	384	1 791	968	1 277
Zinc	t	27 435	21 471	21 576	17 578	15 007	15 775
Restricted items (b) .....	..	n.a.	n.a.	n.a.	2 272	4 015	5 528
Other .....	..	n.a.	n.a.	n.a.	3 055	2 461	2 346
Total .....	..	n.a.	n.a.	n.a.	64 822	71 935	66 139
Indonesia							
Ferro-alloys	t	5 528	3 251	6 998	1 603	1 155	2 276
Food beverages	t	317	556	1 074	430	743	1 546
Zinc	t	25 361	30 358	42 522	14 313	20 166	26 872
Restricted items (b) .....	..	n.a.	n.a.	n.a.	2 472	1 072	4 935
Other .....	..	n.a.	n.a.	n.a.	460	1 622	1 310
Total .....	..	n.a.	n.a.	n.a.	19 277	24 758	36 938
Germany, Federal Republic of							
Animal casings .....	..	n.a.	n.a.	n.a.	78	98	165
Apples, fresh or chilled	t	3 300	4 760	2 464	1 071	1 575	819
Honey	t	104	141	156	93	137	153
Onions, fresh	t	24	1 682	2 418	4	315	509
Timber	m ³	2 155	2 620	1 582	572	797	570
Tungsten concentrates	t	1 887	1 908	2 375	18 701	18 142	22 814
Wool, greasy	t	721	526	777	1 812	1 406	2 366
Restricted items (b) .....	..	n.a.	n.a.	—	3	1	—
Other .....	..	n.a.	n.a.	n.a.	1 159	1 654	789
Total .....	..	n.a.	n.a.	n.a.	23 492	24 125	28 184

(a) Trawlers and other fishing vessels exported after temporary operations in Tasmanian waters.

(b) Comprises the value of item (a) for which details are not available for separate publication.

RETAIL TRADE IN TASMANIA

Establishments

The following table provides structural details of the retail trade sector in the state. The number of retail establishments and employment are shown classified according to categories of retail establishments.

**Retail and Selected Service Establishments and Persons Employed by Industry Class
Tasmania, June 1974 and 1980**

Description	ASIC code (a)	1974		1980	
		Establish- ments	Persons employed (b)	Establish- ments	Persons employed (b)
		no.	no.	no.	no.
Food stores	488	1 441	6 114	1 374	6 954
Motor vehicle dealers, petrol and tyre retailers	486	955	5 683	1 065	5 468
Clothing, fabrics and furniture stores	484	529	2 703	703	2 855
Household appliance and hardware stores	485	291	1 354	335	1 216
Department and general stores	481	80	2 766	40	2 530
Other retailers	489	571	2 154	751	2 541
Total retail establishments		3 867	20 774	4 268	21 564
Restaurants, hotels and accommodation	923	417	5 737	615	6 524
Licensed clubs	9 241-43	163	673	142	702
Hairdressers and beauty salons	935	256	773	63	377
Laundries and dry cleaners	9 340	n.a.	n.a.	36	307
Motion picture theatres	9 133	n.a.	n.a.	10	133

(a) Australian Standard Industrial Classification (1978 Edition).

(b) Includes working proprietors.

As shown by the following table retail establishments are evenly distributed throughout the principal areas of the state.

**Census of Retail Establishments and Selected Service Establishments, Tasmania, 1979-80
Retail Establishments (a)—Selected Items by Statistical Division**

Statistical division or sub-division	Establishments at 30 June	Employment at 30 June (persons) (b)	Wages and salaries (c)	Turnover
	no.	no.	\$'m	\$'m
Hobart	1 595	9 120	54.9	525.9
Southern	272	716	1.8	29.4
Tamar	1 077	5 707	34.0	320.6
North-Eastern	189	557	1.6	23.3
Total Northern	1 266	6 264	35.6	343.9
North-Western	1 032	5 099	28.8	298.8
Western	103	365	1.8	18.4
Total Mersey-Lyell	1 135	5 464	30.6	317.3
Total Tasmania	4 268	21 564	123.0	1 216.3

(a) Includes all retail establishments except bread and milk vendors.

(b) Includes working proprietors.

(c) Excludes drawings by working proprietors.

Quarterly Estimates of Value of Retail Sales

Each quarter, the ABS collects returns of retail sales from a sample of all retail businesses recorded in the most recent census of retail establishments. The sample selected represents the field covered by the census. This sample is varied annually to make provision for 'new' establishments opening up, 'old' establishments closing down and 'old' establishments changing type. ('Old', in this context relates to business as recorded at the most recent census of retail establishments.)

The following tables set out details of estimated value of retail sales, by commodity groups.

Estimated Value of Retail Sales by Commodity Groups, Tasmania
(\$ million)

Period	Commodity group					
	Groceries	Fresh meat	Other food	Beer, wine, spirits	Clothing, drapery, footwear	Kitchenware, china, garden equipment and electrical goods
1973-74 (a)	63.8	26.2	35.8	47.8	76.1	38.9
1977-78 (b)	120.8	37.6	64.0	91.6	133.1	82.1
1978-79 (b)	134.1	46.8	75.5	99.0	138.5	80.9
1979-80 (a)	168.0	55.9	71.9	105.6	151.0	81.2
1980-81 (b)	171.5	55.2	99.0	114.0	154.6	89.6
1981—						
March	41.2	13.4	24.9	28.9	34.3	20.2
June	43.8	13.9	25.0	27.4	41.3	22.5
September	45.5	14.4	25.8	28.4	37.9	22.4
December	52.2	15.6	28.5	33.6	46.1	29.0
1982—						
March	49.1	15.2	26.5	31.1	38.3	20.9
Period	Commodity Group					Seasonally adjusted, total (excl. motor vehicles etc.)
	Furniture and floor coverings	Chemists' goods	Newspapers, books and stationery	Other goods	Total (excl. motor vehicles etc.)	Seasonally adjusted, total (excl. motor vehicles etc.)
1973-74 (a)	21.4	20.2	13.1	31.3	374.5	..
1977-78 (b)	37.8	34.2	29.4	54.8	685.4	..
1978-79 (b)	37.5	39.8	33.0	60.5	745.6	..
1979-80 (a)	39.0	36.7	31.4	76.2	816.9	..
1980-81 (b)	39.9	47.2	41.9	72.8	885.7	..
1981—						
March	8.8	11.2	10.2	17.2	210.3	224.9
June	10.0	11.6	9.8	16.9	222.2	225.8
September	10.2	12.2	10.2	18.2	225.2	233.7
December	11.8	14.8	13.6	24.7	269.9	242.0
1982—						
March	9.2	11.8	10.1	20.5	232.7	247.8

(a) Actual retail census results.

(b) Series based on 1973-74 retail census. Estimates from the new sample have been revised on the basis of information available from the 1979 census of new businesses.

From April 1982, the ABS introduced a redesigned system for producing monthly and quarterly estimates of retail sales. This system now provides state estimates by

commodity group on a quarterly basis. Monthly results from April 1982 are set out in the following table.

Estimated Monthly Value of Retail Sales by Industry, Tasmania
(\$'m)

Period	Grocers, confectioners, tobacco-nists	Butchers	Other food stores	Hotels, liquor stores, licensed clubs	Clothiers	Depart- ment stores	Footwear stores	Hardware stores
1979-80 (a)	248.1	40.4	32.2	102.0	68.9	107.2	16.0	13.6
1982 (b)—								
April	27.6	3.0	3.0	9.2	7.6	9.7	2.0	1.3
May	27.1	3.0	3.0	8.6	8.2	9.1	1.8	1.2
June	27.0	3.1	2.7	7.9	7.6	8.8	1.7	1.1
July	29.3	3.1	3.1	9.0	8.2	9.2	1.6	1.4
August	26.7	3.0	3.1	9.4	6.7	8.0	1.4	1.5
September	28.2	3.0	3.2	9.5	6.6	9.2	1.5	1.4
October	29.1	3.1	3.3	9.9	5.9	9.0	1.4	1.4
November	29.0	3.1	3.4	10.2	8.0	10.1	1.6	1.7

Period	Electrical goods stores	Furniture stores	Floor coverings stores	Chemists	Newsagents	Other (c)	Total
1979-80 (a)	43.4	28.8	12.1	29.2	26.9	41.3	810.2
1982 (b)—							
April	4.4	2.6	1.0	3.1	2.9	4.2	81.6
May	4.0	2.9	1.0	3.0	2.9	4.2	80.1
June	4.5	3.1	1.0	3.0	2.8	4.2	78.7
July	4.5	2.5	1.1	3.3	3.0	4.1	83.3
August	4.2	2.5	1.1	3.2	3.0	3.9	77.7
September	4.2	2.3	1.0	3.1	3.1	3.9	80.3
October	3.6	2.4	1.1	3.2	2.8	4.3	80.5
November	4.6	2.6	1.1	3.5	3.0	4.3	86.2

(a) Actual retail census results. Excludes (with the exception of ASIC classes 9232 and 9233) single establishment enterprise with turnover of less than \$50 000.

(b) Series is based on the 1979-80 Retail Census. For standard errors of level and movement of monthly data, see the appropriate issue of the publication *Retail Sales of Goods (Excluding motor vehicles, parts, petrol, etc.)*, (8501.0).

(c) Includes general stores, other goods stores, hairdressers and cafes and restaurants.

EXPORTING FINANCE AND INSURANCE CORPORATION

The Export Finance and Insurance Corporation (EFIC) is a public instrumentality guaranteed by the Federal Government. EFIC's statutory function is the encouragement of trade with overseas countries by providing a specialised range of insurance, guarantees and financing facilities not normally obtainable from commercial insurers. It is required to operate on commercial lines and to be self-supporting. Australia-wide, EFIC has approximately 1 200 policyholders and insures approximately \$2 billion worth of Australian exports each year.

Range of EFIC Facilities

Facilities provided by EFIC fall into five main categories:

- (i) insurance of exporters against the risk of non-payment by overseas buyers for a variety of commercial, economic and political risks;
- (ii) guaranteeing Australian banks and financial institutions in respect of finance they provide to Australian exporters;
- (iii) financing, in special circumstances and at concessional rates of interest, Australian exports of capital goods and related services;

- (iv) insuring Australian firms investing in enterprises in foreign countries against the risk of loss from expropriation, war damage or exchange transfer delays;
- (v) assisting banks and insurance companies to provide the various types of bonding facilities and insuring against the possible unfair calling of bonds established as support for export transactions.

Assistance with Finance

EFIC does not provide finance for goods sold on relatively short payment terms. However, claims payable under EFIC's policies may be assigned to the bank or financial institution that is backing the policyholder. In this way, the EFIC policy can be used by the exporter as a form of collateral security to assist in financing his export trade.

Cost of Cover

Premium rates are based on the markets to which the exporter ships and the length of credit which he extends to his overseas customers. At present, the average rate over the whole range of EFIC short-term business is less than 50c per \$A100 of exports insured.

Activities within Tasmania

The EFIC Office serving the Victoria-Tasmania region is located in BHP House, 140 William Street, Melbourne (Telephone (03) 67 5302). Contact can also be made through the Regional Director, Department of Trade and Resources, Continental Building, 162 Macquarie Street, Hobart. During 1981-82, 12 Tasmanian EFIC policyholders had total export cover of \$3.15 million. Other Tasmanian companies had export insurance cover with EFIC arranged through their mainland head offices. Principal Tasmanian exports covered were dairy produce, fresh fruit and vegetables, and timber.

TOURISM

This section, apart from the 'Tourist Industry' and 'Tourist Accommodation Statistics', has been contributed by the Department of Tourism.

Introduction

Tasmania is unique among the Australian States because it is an island with relatively short distances separating population centres. The populated areas of the State are serviced by a main road network of a high standard and, in addition, the scenery and topography (see also the section 'Physiography' in Chapter 2) is fascinatingly varied. Without travelling for any great distance one can encounter long white beaches, coastal heaths and sand dunes, dense rain forests, rugged mountains, alpine moors and snow country, undulating hill country, fertile river valleys, numerous lakes and rivers, lush green pastures, orchards, convict ruins, many fine examples of early colonial architecture and extensive hydro-electric developments. Angling, bushwalking and caverneering are strong attractions for enthusiasts. As a result, tourism is of great importance to Tasmania and is vigorously promoted.

Passenger Arrivals

The passenger statistics collected by the Department of Tourism do not represent tourists, as they include Tasmanians returning to the State and visitors travelling for reasons other than tourism, such as business. They do, however, indicate general movements in tourist travel to the State.

Over the past six years, monthly passenger arrivals have conformed to a marked seasonal pattern distinguished by an accentuated trough in July, a major peak in January and minor peaks in October and April.

During 1981-82 the number of passengers who travelled to Tasmania approached 600 000 which constitutes an overall increase of 1.21 per cent on the almost 590 000 passengers in 1980-81. Of this 600 000, nearly 90 per cent travelled by air.

Almost 10 000 passengers (1.64 per cent of total passenger arrivals during 1981-82) entered Tasmania with the Hobart-Christchurch air service. Approximately 56 per cent of passengers (around 330 000) entered Tasmania via the main northern ports of entry—Wynyard, Devonport and Launceston.

The next table shows passenger arrivals dissected by month and port of entry for 1981-82. (For details of recorded interstate arrivals and departures for recent years, see the section 'Interstate Arrivals and Departures' in Ch. 6).

Passenger Arrivals, Tasmania, 1981-82
(Source: Department of Tourism)

Month	Port of entry								Total
	Hobart	Laun- ceston	Wynyard	Devonport			King Is.	Flinders Is.	
				By Air	By Sea	Total			
July	15 635	9 358	2 543	1 990	2 221	4 211	325	12	32 084
August	20 082	14 156	3 301	3 067	5 260	8 327	381	34	46 281
September	22 008	14 638	3 652	3 551	5 115	8 666	469	16	49 449
October	25 518	16 209	4 026	2 995	6 397	9 392	350	24	55 519
November	18 490	14 452	2 855	2 724	5 385	8 109	481	41	44 428
December	23 766	19 522	4 487	4 575	5 244	9 819	669	109	58 372
January	30 134	25 556	4 534	5 430	6 631	12 061	684	97	73 066
February	22 609	15 919	3 079	3 307	5 182	8 489	443	69	50 608
March	18 807	14 934	2 711	2 947	5 215	8 162	415	57	45 086
April	21 752	16 568	3 117	3 230	4 928	8 158	518	70	50 183
May	21 210	16 095	3 239	3 147	5 370	8 517	350	52	49 463
June	18 508	12 504	4 299	2 792	3 365	6 157	515	50	42 033
Total	258 519	189 911	41 843	39 755	60 313	100 068	5 600	631	596 572

Almost all vehicle traffic and passenger sea traffic from the mainland to Tasmania is between Melbourne and Devonport on the Australian National Line's 'sea road' service. The next table shows details of Bass Strait vehicle and passenger sea traffic from Melbourne to Devonport for 1981-82 by month of arrival.

Bass Strait Vehicle and Passenger Sea Traffic:
Melbourne to Devonport 1981-82
(Source: Department of Tourism)

Month	Motor vehicles	Caravans and trailers	Passengers
July	655	15	2 221
August	1 476	49	5 260
September	1 443	78	5 115
October	1 823	90	6 397
November	1 462	54	5 385
December	1 408	61	5 244
January	1 596	55	6 631
February	1 397	52	5 182
March	1 430	50	5 215
April	1 273	30	4 928
May	1 567	22	5 370
June	976	16	3 365
Total	16 506	572	60 313

1981 Visitor Survey

In 1978, the Department of Tourism collaborated with the Australian Bureau of Statistics in conducting a survey of passengers departing from the main commercial mainland Tasmanian ports. The purpose of the survey was to assess the annual flow of visitors to the State and to obtain detailed information regarding their visits, particularly those who were travelling on holiday. Owing to the success of the survey in 1978, a second Visitor Survey was carried out during 1981.

Approximately 58 per cent of departing passengers sampled in 1981 were visitors to the State and 42 per cent Tasmanian residents. From the survey results it was possible to calculate that almost 307 000 passengers were adult visitors (over 15 years), who stayed one night or more in Tasmania. Of these adult visitors, 230 000 came purely for holiday purposes, 65 000 for business and the remaining 12 000 for other purposes.

The average length of stay for adult visitors was 10.9 nights; 27.5 per cent stayed 1 to 3 nights, 26.2 per cent stayed 4 to 7 nights and 46.3 per cent stayed in Tasmania for more than one week.

Taking into account traffic not covered by the survey, it was estimated that total visitor expenditure in the State during 1981 was approximately \$180 million whilst per capita expenditure was \$571.89.

Department of Tourism

The Department of Tourism is responsible for the development of Tasmania as a tourist destination. It pursues this objective through the provision of travel information, sales and marketing services for tourists, the provision of financial assistance for approved tourism development projects, the registration of all categories of commercial accommodation, regulation of the erection of certain types of road-side signs in non-urban areas and through research into specific aspects of Tasmania's tourist industry.

The Department continues to expand its advertising, promotional and publicity activities. In 1981-82 direct expenditure on these activities amounted to \$2 000 000 an increase of 54 per cent over the previous year. National advertising campaigns conducted during the year incurred an expenditure of about \$1 000 000.

The sales arm of the Department consists of the Tasmanian Government Tourist Bureaux which are located at Hobart, Launceston, Devonport, Burnie, Queenstown, Melbourne, Canberra, Sydney, Brisbane, Adelaide and Perth. These bureaux display promotional material relating to Tasmania, disseminate Tasmanian tourist information, answer specific inquiries, organise and sell package tours within the State, and assist and act as agents for other travel organisations which provide tourist services to and within Tasmania. In turn, the bureaux are represented throughout Australia, in New Zealand and in Papua New Guinea, by some 870 accredited travel offices, and a Sales and Promotion Officer is attached to the Australian Tourist Commission in Auckland, New Zealand.

During 1981-82, the sales receipts of all bureaux amounted to \$31 180 952 of which 65 per cent was generated outside Tasmania. This represents an increase of 18.9 per cent on receipts of \$26 233 914 for the previous year. Receipts of the mainland bureaux increased by \$2 656 119 compared with an increase of \$2 290 919 in receipts of the Tasmanian bureaux.

The Department also promotes capital investment in tourist accommodation, transport and facilities by providing loans, guarantees and grants for approved projects. During 1981-82 the Minister for Tourism approved one loan for \$21 000 and 43 grants to a value approaching \$360 000 were made to municipal councils, sporting bodies and other organisations for tourism promotional activities and other development projects throughout the State.

The Tasmanian Tourist Council

The Tasmanian Tourist Council represents the private sector of the tourist industry, and its extensive State-wide membership is drawn from businesses and organisations both directly and indirectly involved in tourism. It is acknowledged by the State Government to be the voice of private enterprise, and as such works closely with the Department of Tourism in the development of Tasmania's visitor industry.

Regional tourism interests have the opportunity to co-ordinate their activities through the various Divisions of the Council, and each Division is represented on the Council's Board of Management. The Board of Management also includes representation from

industry, affiliated associations and various tourism orientated State Government departments.

In its publishing role, the Council produces annually the *Official Visitors Guide to Tasmania*, and the widely accepted *Let's Talk About* series of publications.

In 1976 the Council held its first annual tourism seminar at Devonport. This event is now firmly established on the tourist industry calendar, and is conducted each year at different venues around the State. As well as providing an educational forum for the tourist industry, these seminars also involve the local community and serve to demonstrate the benefits that tourism can contribute to the local economy and life-style.

The 'Tourist Industry'

In terms of the industrial structure of the economy there is no identifiable sector which can be regarded as the 'tourist industry'. The difficulty is that the provision of goods and services for tourists cannot generally be distinguished from the provision of goods and services for residents. Receipts from tourists for goods and services purchased contribute in varying degrees to the total receipts of a wide range of businesses. Tourists might, for example, be expected to use the services of the insurance industry or to purchase furniture to only a very limited extent whereas, at the other end of the scale, they would be major users of the services provided by the accommodation industry.

Rather than attempt to delineate a separate 'tourist industry' it is therefore much more meaningful to examine the 'tourist impact' on industries within the accepted industrial structure.

Probably the most effective way of measuring tourist impact is to interview suitable samples of tourists and ascertain the pattern and scale of their expenditures while on tour. From these data, estimates can be made of total tourist impact on the purchases of goods and services.

A major part of tourist expenditure is on accommodation. Hence information obtained from establishments which provide accommodation for tourists will reflect tourist impact. It will, of course, also include expenditure by residents (e.g. public bar trade of licensed hotels). The next section contains statistics relating to Tasmanian accommodation establishments. (See also the section 'The Licensing Board' in Chapter 9.)

Tourist Accommodation Statistics

Census, 1979-80

The second census of tourist accommodation establishments covered operations for the 1979-80 year. Census data for 1979-80 are comparable to 1973-74 Census data (see Chapter 18 of the *1977 Year Book*), except for minor differences in scope and definitions of units and establishment types.

Hotels and Accommodation Establishments—Summary of Operations by
Type of Establishment, Tasmania, 1979-80

Type of establishment	Estab- lishments at 30 June	Persons employed at 30 June (a)	Wages and salaries (b)	Turnover	Stocks		Purchases, transfers in and selected expenses	Value added	Fixed capital expen- diture less disposals
					Opening	Closing			
	no.	no.	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Establishments providing tourist accommodation—									
Licensed hotels—									
With facilities	88	2 313	16 644	64 088	1 568	1 797	31 599	32 718	2 958
Without facilities	117	1 090	5 359	32 786	1 254	1 390	20 789	12 134	1 564
Motels, etc.—									
With facilities	52	527	2 998	9 785	96	112	2 732	7 070	1 644
Without facilities	17	41	52	449	9	10	170	280	116
Caravan parks	48	137	540	1 925	20	24	680	1 249	290
Total establishments providing tourist accommodation	322	4 108	25 593	109 033	2 947	3 333	55 970	53 451	6 572

continued next page

TRADE, DISTRIBUTION AND TOURISM

Hotels and Accommodation Establishments—Summary of Operations by
Type of Establishment, Tasmania, 1979-80—continued

Type of establishment	Estab- lishments at 30 June	Persons employed at 30 June (a)	Wages and salaries (b)	Turnover	Stocks		Purchases, transfers in and selected expenses	Value added	Fixed capital expend- iture less disposals
					Opening	Closing			
Establishments providing other accommodation—									
With facilities	—	—	—	—	—	—	—	—	—
Without facilities	55	297	1 950	6 307	170	213	4 022	2 327	1 569
Camping grounds and caravan parks, n.e.c.	11	16	100	80	—	—	18	61	4
Total establishments providing other accommodation	66	313	2 050	6 387	170	213	4 040	2 388	1 573
Establishments not providing accommodation	66	634	3 661	20 940	751	810	13 511	7 488	963
Total all establishments ...	454	5 055	31 304	136 359	3 868	4 355	73 520	63 327	9 108

(a) Includes working proprietors.

(b) Excludes drawings by working proprietors.

Hotels and Accommodation Establishments—Accommodation Capacity by Type of Establishment,
Tasmania, 1979-80
(number)

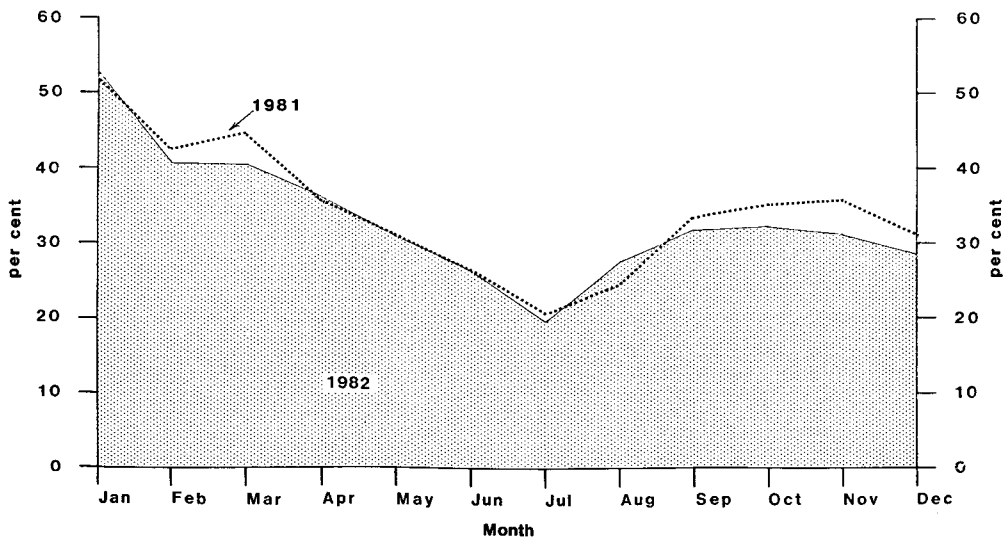
Type of establishment	Number of estab- lishments at 30 June	Accommodation capacity at 30 June						
		Rooms, units, suites, cabins		Beds (a)		Powered sites for caravans		Unpowered sites for tents and caravans
		With facilities	Without facilities	Single (incl. three quarter)	Double	On site vans	Other	
Establishments providing tourist accommodation—								
Licensed hotels—								
With facilities	88	2 610	31	3 564	1 511	—	—	—
Without facilities	117	41	1 076	1 447	281	—	6	16
Motels, etc.—								
With facilities	52	1 227	16	1 793	1 034	—	—	—
Without facilities	17	14	177	267	59	—	—	—
Caravan parks	48	29	35	212	44	316	2 200	1 813
Total establishments providing tourist accommodation	322	3 921	1 335	7 283	2 929	316	2 206	1 829
Establishments providing other accommodation—								
With facilities	—	—	—	—	—	—	—	—
Without facilities	55	36	2 381	3 199	63	—	—	—
Camping grounds and caravan parks, n.e.c.	11	—	6	60	—	16	206	405
Total establishments providing other accommodation	66	36	2 387	3 259	63	16	206	405
Establishments not providing accommodation	66	—	—	—	—	—	—	—
Total all establishments ...	454	3 957	3 722	10 542	2 992	332	2 412	2 234

(a) Includes divans normally used as beds. Excludes beds in on-site vans and all cots.

Survey of Tourist Accommodation

A survey of tourist accommodation has been conducted by the Bureau each quarter since the Census of 1973-74. Statistics are obtained in respect of each month in a particular quarter. The scope of the current survey is the same as that for the 1973-74 Census except for the omission of holiday flats until the June quarter 1982. Holiday flats have been included from and including the June quarter 1982 because of the perceived growth of this segment of the tourist accommodation industry.

Bed Occupancy Rates: Accommodation Establishments with Facilities (a), Tasmania



(a) Hotels, motels, etc. which provide a bath or shower, and a toilet in most guest rooms.

The following definitions apply:

Licensed Hotel with Facilities: A tourist accommodation establishment which is licensed to operate a public bar, provides bath or shower and toilet in most guest rooms, and has breakfast available for guests.

Licensed or Unlicensed Motel, Private Hotel or Guest House with Facilities: A tourist accommodation establishment which provides bath or shower and toilet in most guest rooms and has breakfast available for guests, but is not licensed to operate a public bar. This category also includes motels that are licensed to serve liquor with meals.

Caravan Park: A tourist accommodation establishment which provides powered sites for caravans, and toilet, shower and laundry facilities for guests.

Holiday Unit Establishment: A tourist accommodation establishment other than a hotel or motel which provides separate self-contained units (flats). Each unit must have separate sleeping, cooking, bathroom and toilet facilities. Establishments not registered as 'holiday flats' under provisions of the *Tourism Act 1977* and those comprising less than five self-contained units are excluded.

Tourist Accommodation Establishment: There is no generally accepted definition of a tourist accommodation establishment but, for the purpose of the surveys, a tourist accommodation establishment has been defined as an establishment which provides accommodation of a predominantly short term nature (i.e. for periods of less than two months) available to the general public. Note that data are collected and published for both long term and short term guests at these establishments.

The following table includes details from the survey for 1979-80 and recent years:

Hotels and Motels, etc., Holiday Unit Establishments and Caravan Parks: Number and Capacity, Tasmania

Particulars	Hotels and Motels, etc.			Holiday Units			Caravan Parks	
	No. of estab-lishments	No. of guest rooms	No. of bed spaces	No. of estab-lishments	No. of units	No. of bed spaces	No. of estab-lishments	No. of sites and cabins
At—								
31 March 1978	122	3 623	9 343	..	..	..	47	3 838
31 March 1979	124	3 672	9 636	..	..	..	51	4 340
31 March 1980	126	3 763	9 987	..	..	..	53	4 600
31 March 1981	131	3 933	10 567	..	..	..	54	4 951
At—								
30 Sept. 1981	143	4 121	11 325	..	..	..	57	4 977
31 Dec. 1981	142	4 108	11 312	..	..	..	56	4 916
31 March 1982	142	4 124	11 339	..	..	..	55	4 881
30 June 1982	142	4 105	11 302	30	357	1 618	54	4 806
30 Sept. 1982	143	4 221	11 581	29	348	1 562	54	4 813

Hotels and Motels, etc: Holiday Unit Establishments and Caravan Parks: Occupancy rates and takings from accommodation, Tasmania

Particulars	Hotels and Motels, etc.		Holiday Units		Caravan Parks	
	Room occupancy rates (per cent)	Takings (\$'000)	Unit occupancy rates (per cent)	Takings (\$'000)	Site occupancy rates (per cent)	Takings (\$'000)
January 1978	73.2	2 054	..	..	52.5	205
January 1979	74.4	2 304	..	..	55.2	281
January 1980	72.7	2 550	..	..	51.7	322
January 1981	68.7	2 820	..	..	53.0	386
January 1982	68.7	3 324	..	..	55.3	421
1981—						
July	35.8	1 446	..	..	12.0	82
Aug.	38.9	1 530	..	..	12.4	96
Sept.	50.5	2 046	..	..	15.5	124
Oct.	55.3	2 393	..	..	15.9	128
Nov.	56.4	2 239	..	..	18.8	150
Dec.	47.0	1 977	..	..	26.4	226
1982—						
Jan.	68.7	3 324	..	..	55.3	421
Feb.	61.4	2 568	..	..	37.1	273
March	63.6	2 903	..	..	23.2	193
April	54.3	2 461	55.9	201	22.7	188
May	46.5	2 079	55.7	209	16.5	133
June	41.3	1 780	52.1	186	15.0	114
July	32.0	1 453	37.1	126	11.9	92
Aug.	43.8	1 888	45.3	152	13.0	103
Sept.	46.2	2 012	55.4	189	14.8	128

TASMANIA—HOLIDAY ISLAND **by Paul Tapp, Tasmanian Publicity Services**

The face of tourism in Tasmania is becoming more and more sophisticated to meet the demands and challenges of the eighties and beyond. Tourism in Tasmania is still history and scenery; Port Arthur, imposing mountains and sweeping beaches. But Tasmania is also modernity; casinos, re-created gunpowder mills and holiday villages.

The industry embraced change and trends with enthusiasm. Tasmania's aggressive marketing style has made the island State a leader in the national tourism industry.

Daylight saving perhaps typifies the Tasmanian attitude of setting the standard—taking the first step, and being prepared to out-step the rest of the nation, for the development of the tourist industry. Tasmania introduced daylight saving in 1967 to the dismay of the nation. Tourists in Tasmania during the summer months grabbed a bonus of an extra seven hours daylight a week, and the Tasmanian tourism industry received a shot in the arm. Some years later, Victoria and New South Wales introduced daylight saving—and came into line with Tasmania.

Tasmania revised its licensing laws too. It introduced the most flexible licensing laws in Australia to boost the tourism industry. Visitors to Tasmania were delighted to be able to call in for a beer with meals seven days a week—and night owls in some licensed premises could even dance and sip drinks until dawn.

The next major advance for Tasmania came in the form of an imposing cylindrical tower, international class cabaret shows and the rattle of a roulette wheel.

The Wrest Point Casino placed Tasmania firmly on the tourism map. Tasmania had done it again; led the way with the nation's first legal casino. A renaissance began in Tasmania. With the casino providing the impetus and continued State Government backing for tourism development generally, the face of tourism in Tasmania began to change.

As moths to a candle, visitors poured into the State to tempt fate at the casino tables—and a major spin-off industry occurred. Restaurants, offering the cuisine of the world, wine bars and other entertainment mushroomed in Hobart.

It would be wrong to leave the impression that Tasmania's surge of visitors were gamblers—for latest figures revealed in the 1981 Visitors Survey clearly show that touring and sightseeing are by far the main attraction. The Wrest Point Casino and more recently the Launceston Country Club casino are still major factors in Tasmania's successful tourist industry. However, they remain never-the-less extras, generally speaking, to Tasmanian visitors.

Sophistication manifested itself in other venues too. The Penny Royal World exemplifies the trend towards compact multi-visitor facilities . . . and the introduction of that vogue terminology 'entrepreneur' to the Tasmanian tourism industry. Roger Smith, creator of the Penny Royal watermill, wind-powered flour mill, and the gunpowder mill, in a disused Launceston quarry site, set the new standard in modern visitor attractions.

The Penny Royal complex fascinates and educates. It is a Disney-style innovation which underscores similar developments across the State. Most are confined to Tasmania's East Coast—the 'quiet side' of the Island, Tasmania. The region's virtues are its sweeping clean beaches and rocky headlands, less rainfall and more sunshine.

The late seventies and into the eighties have seen major east coast developments occur between St Helens and south to the Tasman Peninsula, home of Port Arthur.

Visitor attractions have dominated the developments . . . and have transformed the small fishing village of Bicheno, for example, into a true tourist hamlet. A bird-life and animal park, complete with Australia's most accessible pelicans and hundreds of bird varieties and free-ranging animals is a popular venue for visitors. Alone this complex cost \$500 000. A holiday village at Bicheno, providing high-standard self-contained villa-style units with a plethora of facilities like cray-bakes and barbecues, is another multi-million dollar development. This, the first use of self-contained units, was instrumental in setting a sweeping Tasmanian accommodation trend. The TasVilla chain

in Tasmania today achieves higher than average patronage within the State's accommodation industry. Just north of Bicheno, at Scamander, a favoured coastal holiday township, a \$300 000 holiday village has sprung up.

By the end of 1982, and within a five year period, the East Coast asserted itself as a leading tourism region. In that relatively short period it had undergone a change, which perhaps more than any region, demonstrated the new direction in which the State is heading. Even locals revisiting the East Coast after a short absence would have noted that the coast had truly 'gone mod'.

Other developments which have been added to the East Coast inventory include a bark mill, at Swansea, restored to preserve for posterity, reminders of a past epoch. Bicheno has a modern sea life centre which displays varieties of Tasmanian fish.

On the Tasman Peninsula the tide of change is evident with the establishment of a pioneer's Bush Mill, a Tudor-Style tavern, a major holiday village, a Marine Park—all modern facilities which complement the history-rich Port Arthur. It is a perfect blending of the old with the new. Visitors are compelled to explore the mysteries of Port Arthur. The new facilities, all within easy driving distance, provide a good balance of other things to see and do while on the peninsula.

Port Arthur must never be overlooked as Tasmania's premium tourism attraction, in spite of modern development. It will always be known as Australia's most famous penal settlement . . . and never be fully appreciated until visited; until its visitors have stepped into a dimension of time which records the harshness and brutality of colonial Australia.

In 1981 a Tasmanian Visitor Profile revealed the profound growth rate of the Tasmanian tourism industry. From a few thousand visitors annually in the 1930's when the tourism industry was but an off-shoot of the Railways Department, there's been a dramatic—and ironic—change. Today Tasmania no longer has a passenger railway system—but Tourism has swelled to an enormous visitor intake of 370 000 adult visitors annually.

A high percentage of these people are first-time visitors who are discriminating—demanding of a touch of sophistication with their leisure time in Tasmania. The vast majority have indicated that they will return to the shores of Tasmania, the holiday Island—most were satisfied that Tasmania knows where it's going in terms of visitor entertainment.

Many of our visitors today come to the State through the new Southern Gateway to Australia—using the successful Hobart-Christchurch airlink, another major innovation which is owed generally to the persistence and enthusiasm of the Tasmanian tourist industry—one which has an enviable national reputation for its sophisticated approach to an industry which each year is playing a more vital role in the State's economic well-being.

Tasmania—Land of Contrasts

Tasmania's 68 000 square kilometres are crammed with some of the most mountainous scenery in the world. It's an island of rugged westlands, a central plateau broken by steep mountains, narrow river valleys, and an Eastern coastal region offering a soft English pastoral beauty. So it is no wonder that Tasmanians overseas get little joy when their home is noted as the sunburnt country and the land of sweeping plains, because, by complete contrast, the island is a mass of greenery and granite; an island of mountains.

It embraces hidden treasures for its visitors; rugged peaks with many limestone caves and deep valleys holding sparkling glacial lakes. There is no point on Tasmanian soil where a mountain range cannot be seen. It may well come as a surprise even to Tasmanians that the British Admiralty Pilot Book describes their State as probably the most mountainous island in the world. It is not their size, but the frequency of the mountain ranges which earn the island that reputation. There are more than 60 mountainous features ranging between 915 and 1 500 metres high.

There are the Central Highlands, where from selected vantage points, the fascinating physical characteristics of the State can be better understood. The mountains and lakes of the highlands provide visitors with striking contrasts.

The impenetrable wet West Coast is a totally different country from the East Coast, yet the two coastlines are merely 300 kilometres apart.

Access to the Western region is by way of the Lyell Highway, which offers scores of opportunities for motorists to view its awesome solitude; one of the world's last wilderness areas unchanged since the Ice Age. Its craggy peaks, buttongrass plains, and the dense vegetation of the temperate rainforest, is characterised by myrtle, sassafras and leatherwood trees, the famous Celery Top, King Billy and Huon Pine trees, and a magnificent variety of ferns, mosses and wildflowers. The West has an appeal of its own, generated by its wild rivers, windswept beaches, countless shipwrecks, awesome topography and turbulent history. It is hard to feel far from the days of the pioneers in this country of wild mountain ranges, lonely valleys, dense rain forest (three or four times the rainfall of the East) and bushland free of manmade tracks.

While the heaviest of the rain falls on the West, the East Coast in the last few years, particularly, has been caught up in drought. The East Coast, with its sheltered beaches, rocky coastline, surf, boating and prime fishing spots, together with the best of Tasmania's weather, is the Summer holiday home for thousands of Tasmanians and tourists alike. St Helens, Scamander, Bicheno, Coles Bay, Swansea and Orford are noted East Coast resorts. By contrast to the West, the immense stretches of pure white sandy beaches on the East Coast would be hard to parallel anywhere in the world.

Tasmania's climate is perhaps most maligned, and Tasmanians like most people are apt to complain about the weather. But, in reality, there is little to complain about. Officially the weather is classified as temperate maritime, which effectively means that extreme weather conditions of any sort are rare. Even though no part of Tasmania is more than 115 kilometres from the sea, the West Coast and central mountain region has introduced some continental effects to local weather patterns. On the whole, however, temperatures rarely exceed Summer maxima above the mid 30's and Winter minima more than a couple of degrees below zero. Tasmania, by contrast with Mainland Australia, enjoys marked seasons. Within that range of seasons there is an ideal climate for everybody.

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Chapter 17

TRANSPORT AND COMMUNICATION

PORT AUTHORITIES

Introduction

Tasmania has a number of ports capable of accommodating overseas vessels; they are sited on the Derwent and Huon Rivers in the south (Hobart and Port Huon); in Spring Bay on the east coast; on the river Tamar in the north (Inspection Head, Long Reach and Bell Bay); on the Mersey River (Devonport), in Emu Bay (Burnie) and at Port Latta, all in the north-west. All these ports provide depths of approximately nine metres or more of water at berths; Port Latta provides a depth of 16 metres nearly one and a half kilometres off-shore.

Interstate and intrastate trade passes through the main ports and operates as well through ports at Strahan, Stanley, Ulverstone, Currie (on King Island) and Lady Barron (on Flinders Island).

This section deals primarily with the authorities which control the harbours but a brief description is given of the main ports.

Port of Hobart

Location

The approach to the Derwent and the Port of Hobart is made through a very wide strait between Cape Queen Elizabeth (Bruny Island) and Cape Raoul (Tasman Peninsula), approximately 50 kilometres south-east of the city. The mouth of the Derwent, five and a half kilometres wide, lies 19 kilometres south-east of the port which is built upstream on the western bank in a sheltered cove; the opposite bank lies two and a half kilometres away to the east. The shores of the Derwent and the arms of the cove act as natural breakwaters.

Description

The present main port is situated in the Sullivan's Cove and Macquarie Point area. Sullivan's Cove is U-shaped with 610 metres separating the southern and northern arms. The southern area is devoted to Princes Wharf with berths numbered one to four although No. Four is now occupied by the CSIRO. Between Nos. 1 and 2 is Princes Intermediate, the bulk grain berth. The centre of the cove contains Elizabeth Street Pier, while the northern area is made up of Macquarie Berths No. 1, 2 and 3. Turning up river from the outer end of Macquarie Berth No. 3, the area known as Macquarie Point has been developed to provide the port with two additional roll-on roll-off berths and one container/general cargo berth. This area has now become the major centre of port activity, and has been provided with modern cargo handling equipment, including a 254-tonne fully mobile crane, suitable for handling containers. The two roll-on roll-off berths are operated by the Union Steamship Company's 'Seaway' interstate service, connecting Hobart with Melbourne and Sydney. The third new berth is 224 metres long and is capable of accommodating the largest general cargo carriers in service. Adjacent to these new berths is 8.4 hectares of sealed cargo area, three large all weather cargo sheds, a dual rail spur connecting into the State's main rail system and adequate holding points for refrigerated containers.

The most striking feature of the Port of Hobart is the ease with which large vessels can be brought to berth. Tides present no problem, the maximum rise and fall being 1.37 metres (average approximately 0.61 metres), and dredging of approach channels has never been necessary.

Subsidiary Ports

In addition to the main port in the heart of the city, there are a number of subsidiary outlets serving the south of the State. Port Huon wharf, located on the west bank of the Huon River near Geeveston, is in the centre of the principal orcharding area and used mainly for fruit exports. Also based on the Huon River (at Hospital Bay) is the APM Ltd private wharf (for export of paper pulp). At the Port of Spring Bay near Triabunna on the east coast, accommodation has been provided for bulk carriers loading woodchips for Japan. In the Derwent itself, four kilometres upstream from the main port, is a tanker berth at Selfs Point where bulk petrol and oil are stored; tankers pass under the 47-metre high navigation span of the Tasman Bridge on their way to Selfs Point.

The Selfs Point area has been developed as a petroleum products storage area and has replaced the Macquarie Wharf facilities as Hobart's petroleum installation. One and a half kilometres upstream from Selfs Point is the Electrolytic Zinc Company Ltd private wharf at Risdon. At Boyer, located nearly 32 kilometres upstream from the main port, is the Australian Newsprint Mills Ltd plant. Newsprint is ferried to the main port by barge.

Administration

The Marine Board of Hobart is the authority controlling the main ports of Hobart, Port Huon, Strahan, and the Port of Spring Bay. The Board's jurisdiction covers the west, south and east coasts of Tasmania between the parallel of $41\frac{1}{2}^{\circ}$ south latitude and Cape Portland.

Port of Launceston

Location

The Port of Launceston is situated on the River Tamar, which originates at the confluence of the North Esk and South Esk Rivers at the City of Launceston and flows 60 kilometres to Bass Strait where deep water and broad expanses of river provide a valuable natural harbour. In this area, encompassing Bell Bay, Inspection Head and Long Reach, are located the major activities of the Port of Launceston. A tidal range of up to 3.6 metres creates strong tidal currents, which by natural scour eliminate the need for any maintenance dredging in the lower reaches of the river.

Because extensive areas of deep water frontage are available, the development of the port is decentralised with the main operations located as follows:

- (i) *Bell Bay*: The Bell Bay site is on the eastern shore, some 13 kilometres upstream from the mouth of the Tamar. The Bell Bay and Long Reach areas are linked to the railway system. Wharves include the Comalco Aluminium Bulk Berth, the ANL Melbourne/Sydney roll-on roll-off/lift-on lift-off Cargo Terminal, the Temco Bulk Berth, the PLA tanker berth and the PLA Common User Berth general cargo berth. The port has large, modern cold store facilities, stock-yards and petroleum and LP gas storage tanks.
- (ii) *Long Reach*: Port facilities have been developed upstream from Bell Bay, the main function being export of woodchips from adjacent plants.
- (iii) *Inspection Head*: Overseas berths are situated on the western bank, opposite Bell Bay, for shipment of fruit, frozen meat, fish, wheat and general cargo. Large cool storage and freezer facilities are provided as well as bulk storage and special loading facilities for tallow.
- (iv) *Kings Wharf, Launceston*: Includes berths for interstate and intrastate trade; facilities also include a graving dock and shiplift and fitting-out berths for docking and repair of vessels up to 2 200 tonnes.

Description

All berths and facilities now in service in the port have been constructed since about 1950. Channel and lighting improvements in the lower reaches have been carried out over recent years, permitting vessels drawing up to 11.1 metres to work the river for 16 kilometres from Bass Strait to the site of the new woodchip berths in Long Reach. The channel improvement works were designed to provide for the rapidly growing industrial complex at Bell Bay which is creating an ever increasing demand for large bulk carriers.

Administration

The port is administered by the Port of Launceston authority whose jurisdiction covers the full length of the river Tamar, together with the northern coastline westward to Badger Head and eastward to Cape Portland.

Port of Devonport

Location

The Port of Devonport is situated on the Mersey River within two kilometres of the coast. The entrance is sheltered by Mersey Bluff on the west and by a retaining wall extending over half a kilometre northward from the eastern shore of the river. The river was always a natural harbour for small craft and its development as a major port by extensive dredging and engineering works has resulted in a secure harbour for large ships.

Description

The main harbour is formed around two turning basins, each 259 metres in diameter with wharves on both banks providing 1 067 lineal metres of berthage.

The western bank contains four overseas and interstate berths and one specialised cattle jetty. These berths are provided with storage sheds, oil pipelines, wheat silos, bulk cement silos and bulk tallow silos, as well as one of the largest and most modern cold storage facilities in the State. Provision has also been made for the handling of bulk commodities and heavy lifts while all berths are connected to the railway network.

Two terminals for roll-on roll-off and container cargo are located on the eastern bank; one is leased to the Australian National Line and the other is a common-user facility. Both are equipped with stern loading ramps and cranes for lift-on lift-off cargo. Extensive vehicle marshalling and cargo assembly areas are provided, with land available for expansion. Both major unitised and container operating berths are fully equipped with power points for refrigerated containers. Approximately 115 000 passengers pass through the No. 1 Terminal each year. In July 1972 the *Empress of Australia* replaced the *Princess of Tasmania* on the passenger run to and from Melbourne. The ANL vessels *Sydney Trader*, *Brisbane Trader*, and *Townsville Trader* maintain a regular cargo service from both terminals.

A 30-tonne portal travelling crane at No. 2 Berth is capable of handling all types of cargo units. For the speedy handling of bulk cargoes a 14-tonne grab and 40-tonne capacity hopper are available as auxiliaries to the crane. A 30-tonne portainer crane operates at No. 1 Berth. Further extensions of port facilities will depend on proposed expansion by major industries in the area.

Port of Burnie

Location

The ports of Hobart, Launceston and Devonport all lie within the shelter of rivers but the Port of Burnie, on Emu Bay, was built out into the open sea in the lee of Blackman Point. Protection from the potentially rough seas of Bass Strait is afforded by two large breakwaters. Burnie is a deep-water port with no tidal restrictions, except occasionally for the larger vessels, and is virtually fog-free. It is in operation 24 hours every day, and

vessels can be at full speed 20 minutes after departure. All wharves are connected to the State railway system.

Description

The shelter necessary for all-weather use of the port is provided by a 380-metre breakwater extending from Blackman Point in a south-easterly direction. The wharves are thus protected by the point and by the breakwater from swells coming in from the west or north, the two quarters from which heavy seas are feared. Ocean Wharf is constructed immediately in the lee of the breakwater, the two structures appearing as one. Other berths are provided by piers basically parallel to the breakwater but lying further south.

An island breakwater sited north-east from the end of Ocean Wharf and consisting of concrete caissons 488 metres long, is orientated south-east and is calculated to give ample protection for up to 610 metres of berthage south of existing piers. An interesting feature is the use of the lee of the island breakwater for a tanker berth for both petroleum and sulphuric acid. The fuel is pumped to the land along a submarine pipe, and the sulphuric acid is pumped from the berth over a bridge spanning the gap between the two breakwaters.

A modern passenger and roll-on roll-off cargo terminal handles general cargo shipped by Australian National Line vessels servicing Melbourne, Sydney, Fremantle and Queensland ports. The terminal is equipped with a 35 tonne container handling crane with a 50 tonne heavy lift capacity. A further roll-on roll-off berth at North McGaw Pier handles general cargo for the Adelaide service.

Burnie has five other berths in regular use. Ocean Wharf and North McGaw are conventional berths used for general cargo. South McGaw Pier is equipped with one 12-tonne and one 25-tonne crane. Jones Pier North is a bulk cargo berth, capable of handling vessels up to 250 metres in length and 10.0 metres draft. It is traversed by a conveyor loader, owned by the Emu Bay Railway Company Ltd, with a loading rate of 1 270 tonnes per hour. It handles zinc, lead and copper concentrates from the west coast mines. Jones Pier South is the port's major general cargo berth, used by quarter ramp R.O.R.O. vessels, and cellular container vessels. It has two large transit sheds, incorporating a cold store. Adjacent to this berth is a container compound with a capacity of 250 standard 'T.E.' units of which 96 may be reefer. There is additional storage area close by for a further 250 units, and also a bulk tallow installation servicing both North and South Berths.

Circular Head (Port Latta)

A deep-water offshore terminal, capable of accommodating bulk ore carriers, has been constructed at Port Latta for the export of iron ore pellets to Japan. The loading facility consists of a 1.2 metre wide conveyor belt which carries pellets to two swivel loaders located 1.6 kilometres offshore. Vessels moor in 15.8 metres of water to take on pellets, the system having a discharge capacity of about 3 050 tonnes per hour.

Constitution of Port Authorities

Election of Wardens

The present system of choosing port authority wardens is summarised in the following table:

Port Authorities: Election of Wardens

<i>Authority</i>	<i>Number of wardens</i>	<i>System of election of wardens</i>
Hobart Marine Board	9	Special electorate of ship-owners, importers and exporters
Port of Launceston Authority	5	Electorate of Launceston, Beaconsfield and George Town as for local government elections
Burnie Marine Board	9	Municipal electors within proclaimed area
Devonport Marine Board	11	
Circular Head Marine Board	7	
King Island Marine Board	5	Appointed by the Government
Flinders Island Marine Board	3	

Boards of Hobart and Launceston

The wardens of the Hobart Marine Board are elected by a special electorate of shipowners, importers and exporters. The number of votes that each importer and exporter may exercise is proportional to the value of goods he imports or exports, while ship-owners' voting rights are proportional to the tonnage of their vessels. Three wardens retire each year; the Master Warden is elected by Board members annually.

In the case of the Port of Launceston Authority, marine board electors are those qualified to vote at elections for aldermen of the City of Launceston or for councillors of the municipalities of Beaconsfield and George Town.

Navigation and Survey Authority of Tasmania

The Authority was constituted in 1963 to implement sections of the *Marine Act 1976* relating to the safety of life and property at sea. Member marine boards contribute equally to the costs of running the Authority; the income is derived from survey and service fees.

Finances of Port Authorities

The following table gives details of revenue and expenditure for each port authority in 1981-82:

Port Authorities
Receipts and Expenditure: All Funds, 1981-82
(\$'000)

(\$ 000)								
Particulars	Authority							Total
	Hobart	Launceston	Devonport	Burnie	Circular Head	King Island	Flinders Island	
Revenue Funds								
Receipts—								
Wharfage charges .	2 940	3 125	1 785	2 557	174	196	45	10 823
Other service charges	1 901	3 785	2 726	1 347	86	49	12	9 906
Plant hire	505	910	431	472	21	11	8	2 356
Government grants	—	—	—	—	—	—	—	—
Other (a)	1 058	99	326	407	25	11	19	1 944
Total	6 403	7 919	5 268	4 783	305	267	84	25 029
Payments (b)—								
Administration	809	1 048	405	616	27	71	2	2 978
Debt charges—								
Interest	993	1 038	576	1 372	64	4	12	4 058
Redemption and sinking fund contributions	733	472	293	657	66	4	8	2 233

continued next page

Port Authorities
Receipts and Expenditure: All Funds, 1981-82
 (\$'000)—continued

Particulars	Authority							Total
	Hobart	Launceston	Devonport	Burnie	Circular Head	King Island	Flinders Island	
Revenue Funds								
Works and services	2 293	4 282	2 488	1 884	80	165	64	11 256
Other	259	510	116	53	36	26	8	1 009
Total	5 086	7 351	3 878	4 582	274	270	94	21 534
Loan Funds								
Receipts, loan raisings, etc	77	1 718	650	1 221	—	—	—	3 666
Payments (c)	74	1 640	1 317	1 960	—	—	—	4 990

(a) Includes interest receipts, sundry licences, fines and discounts received.

(b) Excludes amounts applied from reserves for capital purposes.

(c) Includes amounts applied from reserves for capital purposes.

The principal sources of revenue of the port authorities are shipping tonnage rates and import and export wharfage rates; other sources are charges for pilotage services and the hiring of equipment. Expenditure is summarised under the heading 'works and services' which includes the provision of ordinary port services (e.g. pilotage, tug assistance, etc.), the maintenance of the port (e.g. dredging, etc.) and the improvement of the port (e.g. new wharves, new berths, etc.). To raise the additional funds required to finance port improvements, the authorities borrow money subject to State Treasury approval, the Treasury acting on behalf of the Australian Loan Council.

The next table summarises the transactions of all port authorities for recent years:

Port Authorities: Tasmania
Receipts and Expenditure: Summary
 (\$'000)

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
<i>Revenue Funds</i>						
Receipts—						
Wharfage charges	7 162	7 466	8 235	9 111	9 950	10 823
Other service charges	4 587	6 802	6 830	8 343	8 968	9 906
Plant hire	2 301	2 213	2 305	2 251	2 583	2 356
Government grants	—	32	117	114	137	—
Other (a)	989	1 559	1 134	2 084	1 200	1 944
Total	15 039	18 072	18 621	21 902	22 839	25 029
Payments (b)—						
Administration	2 000	1 939	2 086	2 207	2 611	2 978
Debt charges—						
Interest	2 792	3 129	3 531	4 480	4 139	4 058
Redemption and sinking fund contributions	1 939	2 452	2 193	2 143	2 098	2 233
Works and services	6 022	7 891	7 351	8 778	10 590	11 256
Other	1 623	1 354	1 884	3 101	3 220	1 009
Total	14 376	16 765	17 046	20 709	22 657	21 534

continued next page

Port Authorities: Tasmania
Receipts and Expenditure: Summary
 (\$'000)—*continued*

<i>Particulars</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>
<i>Loan Funds</i>						
Receipts—						
Loan raisings	3 875	3 880	2 280	2 700	6 474	2 500
Other	293	303	394	532	1 100	1 166
Total	4 168	4 183	2 674	3 232	7 574	3 666
Payments (c)	3 862	4 597	3 522	6 196	8 120	4 990

(a) Includes interest receipts, sundry licences, fines and discounts received.

(b) Excludes amounts applied from reserves for capital purposes.

(c) Includes amounts applied from reserves for capital purposes.

The following table gives the loan debts of port authorities at the end of each financial year for recent years:

Port Authorities
Loan Debt of Principal Authorities at End of Year
 (\$'000)

<i>Authority</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>
Hobart	12 819	13 333	12 616	11 888	11 097	10 487
Launceston	9 803	9 936	10 094	11 055	11 820	12 013
Devonport	8 262	8 737	9 093	8 821	9 027	9 318
Burnie	12 205	13 280	13 871	14 933	15 480	16 259
Other	1 339	1 296	1 368	1 205	1 145	(a) 1 068
Total	44 428	46 582	47 042	47 904	48 567	49 146

(a) Comprised: Circular Head, \$836 000; Flinders Island, \$174 000; King Island \$58 000.

The next table summarises annual borrowings, aggregate debt and the provision for loan redemption for recent years:

Port Authorities, Tasmania
Loan Raisings: Loan Debt and Provisions for Redemption
 (\$'000)

<i>Particulars</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>
Loan raisings during year (a) .	3 875	3 880	2 280	2 700	6 474	2 500
Loan debt at 30 June	44 428	46 582	47 042	47 904	48 567	49 146
Provisions for loan redemption at 30 June (b)	1 733	1 943	2 392	2 333	2 562	2 854

(a) No loans were raised from the State Government during the period covered by the table.

(b) Balance of sinking funds and loan redemption provision accounts at end of year.

OVERSEAS SHIPPING AT TASMANIAN PORTS

System of Record

From 1 July 1978 shipping statistics are only being compiled for overseas shipping. As a result, from 1978-79 no information is available on interstate shipping. Statistics relating to overseas and interstate shipping at Tasmanian ports for 1977-78 and earlier years are included in the 1981 issue of the *Year Book*.

Overseas shipping statistics are compiled from returns submitted by shipping companies or their representatives to the ABS via Customs Houses at each port in Tasmania. A return is required for each vessel calling at or departing from Australian ports for the purpose of carrying cargo from or to overseas ports. A return must be submitted even if cargo is not discharged or loaded.

Details are not included for the following:

- (i) naval vessels;
- (ii) yachts and other craft used for pleasure;
- (iii) foreign fishing vessels visiting Australian ports for purposes other than the loading or discharge of cargo;
- (iv) geophysical, oceanographic research and seismic survey vessels;
- (v) off shore oil drilling rigs and related vessels;
- (vi) Australian registered vessels operating from Australian ports;
- (vii) all vessels of 200 registered net tonnes and under.

Unit of quantity

Revenue tonne is the unit of quantity predominantly used in the shipping industry. It is the basis on which freight is charged and is obtained by adding mass (tonnes) and volume (cubic metres) units. Because revenue tonnes are derived by adding mass and volume units, they should be used with care.

Overseas Cargo Discharged at Tasmanian Ports

Port	1979-80			1980-81		
	No. of vessels (a)	Vessel calls (b)	Revenue tonnes	No. of vessels (a)	Vessel calls (b)	Revenue tonnes
Burnie	14	79	78 212	10	81	67 263
Devonport	3	13	—	9	26	6 169
Hobart	36	130	127 470	48	137	139 214
Launceston	62	117	80 898	69	119	73 668
Port Latta	26	28	14 463	27	27	12 458
Spring Bay	4	4	—	3	3	—
Stanley	2	2	22 476	—	1	10 535
Strahan	—	1	—	—	—	—
Total	147	374	323 519	166	394	309 307

(a) (b) See footnotes to next table.

Overseas Cargo Loaded at Tasmanian Ports

Port	1979-80			1980-81		
	No. of vessels (a)	Vessel calls (b)	Revenue tonnes	No. of vessels (a)	Vessel calls (b)	Revenue tonnes
Burnie	5	80	204 793	7	84	233 633
Devonport	5	13	14 216	4	29	33 860
Hobart	49	141	741 907	57	148	815 525
Launceston	63	118	2 181 593	71	119	1 864 270
Port Latta	26	26	2 046 410	25	25	2 093 144
Spring Bay	3	3	91 415	4	4	133 816
Stanley	1	2	—	—	1	—
Strahan	1	1	—	—	—	—
Total	153	384	5 280 334	168	410	5 174 248

(a) 'No. of vessels' refers to the number of direct overseas arrivals to, or departures from, Tasmania.

(b) 'Vessel calls' refers to the number of port visits that an overseas vessel makes in Tasmania.

TRANSPORT DEPARTMENT TASMANIA

The Transport Department Tasmania replaced the Transport Commission after the *Transport Act* 1981 was passed by Parliament in May 1981.

Transport Tasmania as the department is generally known, is now subject to Ministerial control and is headed by the Commissioner for Transport.

Functions of Transport Tasmania

The main functions of Transport Tasmania are contained in the following outline taken from the *Transport Act* 1981—

'to devise, initiate and carry out measures for the co-ordination, improvement and economic operation of the means of, and facilities for transport in Tasmania other than rail transport and transport services provided by the Metropolitan Transport Trust'.

In essence this means —

- (i) administration of the *Traffic Act* and regulations concerning traffic control and facilities;
- (ii) traffic engineering associated with the control of traffic;
- (iii) registration and taxation of motor vehicles;
- (iv) regulation and licensing of commercial goods vehicles;
- (v) regulation and licensing of taxi and hire cars;
- (vi) regulation and licensing of privately operated coach and omnibus services;
- (vii) testing and licensing of drivers of motor vehicles;
- (viii) operation of a State-owned shipping service between Stanley/King Island/Melbourne;
- (ix) operation of the Bruny Island ferry service;
- (x) administration of aerodromes under the control of the State Government;
- (xi) operation of the Australian Standard 1822 engineering workshop in Launceston known as PTA Engineering;
- (xii) traffic related research and economic studies and urban transport co-ordination support;
- (xiii) provision of road safety policy advice and motor vehicle design advice.

Transport Department Shipping Services

The Transport Department operates a coastal shipping service between King Island, Stanley and Melbourne and a vehicular ferry service to Bruny Island. During 1980-81 the coastal service was operated by the *Straitsman*. In that year the shipping services carried 20 527 sheep, 27 471 cattle, 51 pigs, and 69 210 tonnes of general cargo. A total of 310 voyages provided essential services to and from King Island and between Stanley and Melbourne.

On the Bruny Island service the *Harry O'May* is the primary vessel backed up by the ferry *Mangana*.

The construction of new terminals at Kettering on the Tasmanian mainland and Roberts Point on Bruny Island was completed and came into operation in June 1983. The crossing is now much shorter allowing for more frequent sailings.

Financial Operations

Annual loss

In 1968-69 and earlier years the Commission received two grants from Consolidated Revenue: (i) reimbursement of the previous year's loss; and (ii) a grant equal to State Land Tax collections. From 1969-70, the loss incurred by the Commission for the previous year has been reimbursed by a single grant from Consolidated Revenue (\$4 689 968, the loss for 1980-81 reimbursed during 1981-82).

Profit and loss

Transport Department, Tasmania: Trading and Profit and Loss Account
(\$'000)

<i>Particulars</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>
<i>Revenue</i>					
Coastal shipping	2 056	2 243	2 696	3 338	4 213
Bruny Island ferry	92	99	102	152	280
Trans-Derwent ferry	220	—	—	—	—
Tool annexe	1 137	1 146	1 491	1 871	2 144
Other revenue	542	638	760	728	367
Net loss (a)	3 107	3 549	4 338	4 690	4 289
Total	7 154	7 675	9 386	10 778	11 294
<i>Expenditure</i>					
Coastal shipping	3 364	3 362	3 624	3 889	4 385
Bruny Island ferry	514	680	736	762	852
Trans-Derwent ferry	330	—	—	—	—
Tool annexe	1 164	1 395	1 809	2 169	2 447
General expenditure	1 782	2 237	3 216	3 959	3 610
Total	7 154	7 675	9 386	10 778	11 294

(a) To be charged against Consolidated Revenue in the following year.

The remaining transactions can be summarised as follows (road safety accounts are excluded):

Transport Department, Tasmania: Motor Taxation Collection, Licensing, etc.
(\$'000)

<i>Particulars</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>
<i>Revenue</i>				
Motor tax	14 441	14 821	18 302	18 512
Public vehicle licensing, fees, etc.	1 121	1 273	658	287
Registration, licences, etc.	4 842	4 101	5 326	(a) 7 666
Refunds of stamp duty	— 7	— 8	— 11	— 11
Stamp duty on vehicle registrations	4 393	5 043	5 891	(b) 7 927
Contributions—Motor Accident Insurance Board	—	—	330	408
Transfers from Consolidated Revenue—				
Road transport administration	2 186	2 404	2 185	2 447
Traffic engineering section	1 038	1 296	1 216	1 380
Total	28 014	28 929	33 897	38 615
<i>Expenditure</i>				
Profit and loss account (transfers) (c)	100	115	120	135
Paid to Consolidated Revenue	24 690	25 116	30 046	34 256
Administration, traffic control, etc.	3 221	3 700	3 743	4 220
Total	28 011	28 931	33 908	38 611

(a) Includes a fire levy of \$1 385 136 which is included in the fee for registration and renewals of vehicles (other than motor cycles)

(b) Includes \$525 660 stamp duty on premiums due to the Motor Accidents Insurance Board payable to the Transport Department as from 1 July 1981.

(c) Receipts from public vehicle licensing paid into profit and loss account.

RAILWAYS

General

Tasmania has a 1 067-millimetre gauge government railway system based on a route network of 864 kilometres. A private railway of 134 kilometres is operated by the Emu Bay Railway Company Ltd between Burnie and Melba Siding (19 kilometres south of Rosebery).

The first Tasmanian railway was the 72 kilometre Deloraine to Launceston line opened in 1871. A 196 kilometre line from Hobart to Western Junction began operating in 1876. (For a brief historical account of the development of the Tasmanian railway system see this section of the 1977 *Year Book*. Chapter 1 of the same edition includes an article on the construction of the main line railway from Hobart to Launceston.)

Federal Takeover

Following negotiations with the Federal Government, the State Government passed the *Railways (Transfer to Commonwealth) Act 1975* which provided for the transfer of control of the State's railway system to the Federal Government with effect from 1 July 1975.

Under the agreement the State retained the following rights: (i) to consult with the Federal Government on any proposals to increase freight rates; (ii) to dispute the abolition of any service where in the opinion of the State Government that service is desirable; and (iii) to consult with the Federal Government on the operation of new or existing railways which are of particular concern to the State. The State was also granted representation on the Australian National Railways Commission and the Australian Shipping Commission for an initial period of five years.

METROPOLITAN TRANSPORT TRUST

The Metropolitan Transport Trust was established as a statutory authority on 21 December 1954 to provide a system of public transport by road within the metropolitan areas of Hobart and Launceston. The *Metropolitan Transport Act 1954*, vested in the Trust, the urban public transport systems, formerly operated by the Hobart and Launceston City Councils. In 1959 bus services operated by a private operator in the Burnie Municipality, were transferred to the Trust. In 1981 State Parliament passed legislation making the Trust subject to ministerial control.

At the time the Trust was established, a major portion of the tramway systems operating in Hobart and Launceston were phased out, and replaced with electric trolley buses. The last tramway service closed down was in Hobart in October 1960. The trolley buses were eventually phased out by 1968 in favour of the more versatile motor bus.

The present MTT service is based entirely on motor buses. As at 30 June 1982 the Trust operated a fleet of 303 buses of which 219 were located in Hobart, 62 in Launceston and 22 in Burnie.

Since 1976-77 there has been a decline in patronage. Among the reasons for this is the public's preference for the private motor car. In more recent years this preference for private transport coupled with the change in shop trading hours to promote family weekend shopping has reduced the need for some weekday bus travel.

Financial Operations of the Trust

The following table shows the income and expenditure of the Metropolitan Transport Trust for recent years:

TRANSPORT AND COMMUNICATION

Metropolitan Transport Trust, Tasmania
Income and Expenditure
(\$'000)

<i>Particulars</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>
<i>Income</i>						
Traffic operations	2 731	3 395	4 021	3 988	4 713	5 416
Other earnings	131	151	165	195	r 183	210
Subsidy, State Government	6 030	6 615	6 520	7 200	8 390	8 787
Total	8 892	10 161	10 706	11 383	r 13 286	14 413
<i>Expenditure</i>						
Traffic operations	4 659	5 013	5 150	5 435	6 131	6 259
Maintenance	1 393	1 532	1 705	1 976	r 2 390	2 882
Power and fuel	443	532	647	872	r 1 179	1 218
Workshop and stores	146	184	190	224	r 259	285
Administration and general	1 562	2 080	2 151	1 855	r 2 456	2 713
Debt charges	282	308	298	304	338	365
Depreciation charges	461	504	531	634	706	802
Total	8 945	10 153	10 672	11 300	r 13 459	14 524

A break-down of income earned from traffic operations in the three centres for 1981-82 (in \$'000) is as follows: Hobart, 4 064; Launceston, 1 013; and Burnie, 339.

Loan Debt of Trust

Net advances to the Trust from the State Loan Fund at 30 June 1982 stood at \$4 018 674.

Operating Statistics

The next table shows the principal operating statistics for the Metropolitan Transport Trust for recent years:

Metropolitan Transport Trust, Tasmania
Operating Statistics

<i>Particulars</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>
Route-kilometres (a)	461	462	464	484	493
Vehicle-kilometres	9 979	9 562	9 511	9 973	9 691
Passenger journeys	r 18 855	r 16 753	r 16 571	r 16 401	r 14 283
Fare income per passenger journey (b)	r 0.18	r 0.24	r 0.24	r 0.29	0.38
Working expenses per passenger journey (c)	r 0.50	r 0.59	r 0.63	r 0.76	0.94

(a) At end of period.

(b) Income from fares only—excludes other revenue.

(c) Excludes debt charges and depreciation.

ROADS AND BRIDGES

Scope

The details relating to roads in the following section refer to:

- (i) 'classified' roads;
- (ii) roads of local government authorities; and
- (iii) roads of other government authorities.

A further qualification is that the roads are those normally open to traffic.

Definitions and Road Lengths

(i) *Classified roads*: These are roads for which the State Government accepts direct responsibility, the construction and maintenance authority being the Department of Main Roads. The length of classified (or State) roads at 30 June 1982 was 3 902 kilometres (see later section for further details).

(ii) *Roads of Local Government Authorities*: The length of roads for which local government authorities accepted responsibility at 30 June 1982 totalled 12 981 kilometres.

(iii) *Roads of Other Authorities*: Roads which were the responsibility of these authorities at 30 June 1982 comprised: roads of the Hydro-Electric Commission, 535 kilometres; Forestry Commission, 4 947 kilometres; total 5 432 kilometres. The Hydro-Electric Commission roads include the Gordon River Road from Maydena to the Gordon River Dam site (85 kilometres) and the Scotts Peak Road which runs from the Gordon River Road to Scotts Peak Dam (35 kilometres).

Apart from some new arterial roads constructed by the Department of Main Roads (e.g. Hobart's southern and eastern outlets), works performed by the Department and local government authorities are almost entirely in the upgrading of existing roads or tracks to a higher standard and the maintenance of existing road standards. Recent construction of roads where no previous route existed has been predominantly attributable to the Forestry Commission in its development of forest areas for commercial use, and to the Hydro-Electric Commission in providing access to power development construction sites. The main areas where the Commission's activities have already affected the road systems are in the upper Derwent; Great Lake; Mersey Valley; the Gordon and Pedder Lakes; and the Pieman River areas.

Surface of Roads

The following table shows lengths of all roads normally open to traffic classified according to road surface and according to the level of government which accepts responsibility for their construction and maintenance. The proportion of classified (State) roads with sealed surfaces has increased from 72.2 per cent at 30 June 1967 to 87.6 per cent at 30 June 1982.

Length of Roads according to Nature of Surface, Tasmania at 30 June

Type of surface	1977	1978	1979(a)	1980	1981	1982
<i>Classified State Roads</i>						
Sealed (b) .....km	3 188	3 256	3 216	3 274	3 404	3 420
Unsealed (c) .....km	457	439	448	486	502	482
Total .....km	3 645	3 695	3 664	3 760	3 907	3 902
Sealed ratio (d)%	87.5	88.1	87.8	87.1	87.1	87.6
<i>Roads of Local Government Authorities</i>						
Sealed (b) .....km	3 998	4 013	3 848	4 302	4 272	4 408
Unsealed (c) .....km	8 816	8 801	8 926	8 666	8 678	8 573
Total .....km	12 814	12 814	12 774	12 967	12 950	12 981
Sealed ratio (d)%	31.2	31.3	30.1	33.2	33.0	34.0
<i>Roads of Other Authorities</i>						
Sealed (b) .....km	122	113	132	136	132	187
Unsealed (c) .....km	5 255	5 604	5 106	5 318	5 496	5 245
Total .....km	5 377	5 717	5 238	5 453	5 628	5 432
Sealed ratio (d)%	2.3	2.0	2.5	2.5	2.3	3.4

continued next page

Length of Roads according to Nature of Surface, Tasmania at 30 June—continued

Type of surface	1977	1978	1979(a)	1980	1981	1982
<i>All Roads</i>						
Sealed (b) .....km	7 308	7 382	7 196	7 735	7 808	8 015
Unsealed (c) .....km	14 528	14 844	14 480	14 529	14 728	14 300
Total .....km	21 835	22 226	21 676	22 264	22 537	22 315
Sealed ratio (d)%	33.5	33.2	33.2	34.7	34.6	35.9

(a) Decreases are due to revision of figures by the Department of Main Roads.

(b) Bitumen or concrete.

(c) Includes roads formed or cleared only.

(d) Sealed roads as a proportion of total roads.

Classified (or State) Roads

The next table analyses the length of classified roads according to their description and surface. The principal State highways include the following: (i) *Arthur* (73 kilometres), from Sorell to Port Arthur; (ii) *Bass* (279 kilometres), from Launceston to Marrawah in the far north-west; (iii) *Channel* (94 kilometres), from Hobart to Huonville, via D'Entrecasteaux area and Cygnet; (iv) *Huon* (99 kilometres), from Hobart to Hythe via Longley and Huonville; (v) *Lake* (149 kilometres), from Deloraine via Great Lake to Melton Mowbray; (vi) *Lyell* (284 kilometres), from Granton near Hobart, to Strahan; (vii) *Midland* (184 kilometres), from Glenorchy to Launceston; (viii) *Murchison* (78 kilometres), linking the Zeehan and Waratah Highways; (ix) *Tasman* (422 kilometres), from Hobart to Launceston, via east coast and St Helens; (x) *Waratah* (72 kilometres), from Somerset to Waratah.

Classified (or State) Roads, Tasmania,
Description and Length of Roads at 30 June 1982
(Kilometres)

Description	Nature of surface		Total
	Sealed (a)	Unsealed (b)	
Highways	1 859	98	1 956
Main roads	1 085	111	1 196
Secondary roads	237	48	285
Tourist roads	73	103	176
Developmental roads	59	25	84
Subsidised roads	108	97	205
Total	3 420	482	3 902

(a) Bitumen or concrete.

(b) Gravel or stone.

Expenditure on Roads and Bridges

As indicated earlier in this section, the responsibility for road construction and maintenance is placed upon the State Government, local government authorities and two public enterprises. The next table gives an analysis of funds available to the State Government for roadworks and of expenditure from State road funds.

Federal Government Road Grants provide the bulk of the funds with a major contribution also coming from motor vehicle taxation, registration fees, etc.

State Road Funds, Tasmania: Receipts and Payments (a)
(**\$'000**)

<i>Particulars</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>
<i>Receipts</i>			
State Government source—			
Motor vehicle and drivers taxation	16 048	18 369	18 896
Road maintenance contributions, taxes and charges	227	302	388
Loans (b)	12 831	11 255	6 931
Petroleum products business franchise licence fees	—	—	3 900
Other	4 628	5 102	5 556
Federal Government grants	27 933	40 965	48 549
Contributions by local government authorities	18	18	18
Total	61 685	76 011	84 238
<i>Payments</i>			
Construction and reconstruction of roads and bridges	42 804	54 687	63 138
Maintenance of roads and bridges	13 519	14 840	16 585
Planning and research	508	541	—
Total	56 831	70 068	79 723

(a) Includes receipts and payments in respect of Forestry Commission and Hydro-Electric Commission roads.

(b) Includes amounts made available from the Loan Fund to the Department of Main Roads, \$4 070 000 in 1980-81 and \$2 439 000 in 1981-82, together with amounts made available to the Forestry Commission and the Hydro-Electric Commission for roadworks.

Receipts and Expenditure, Local Government Authorities

Some of the expenditure appearing in the State Road Funds table consists of grants from the State Government to local government authorities, although such grants are not specifically dissected. Chapter 4, 'Local Government', contains details of: (i) grants from the State to local government authorities for road purposes; (ii) road rates collected by local government authorities; and (iii) expenditure on road construction and maintenance by local government authorities from revenue, and from loan funds.

MOTOR VEHICLE REGISTRATIONS

General

Statistics in this section deal with: (i) motor vehicles 'on register' at specific dates; and (ii) new motor vehicles registered within a specified period, e.g. a year.

Definitions

Register: To be allowed on the public roads, motor vehicles, except those owned by the Federal Government, are required to be registered with Transport Tasmania; State Government vehicles, as well as privately-owned vehicles, are registered with this authority. Federal Government-owned vehicles, except those belonging to the defence services, are recorded on a separate Federal Government register. 'On the register', in this section, refers to both the State and Federal Government registration records, and to all motor vehicles except those of the defence services. Statistics of new motor vehicle registrations comply with the same definition.

Vehicles Included: The statistics cover cars, station wagons, motor cycles and commercial vehicles. Commercial vehicles as defined include utilities, panel vans, rigid and articulated trucks, other truck-type vehicles (i.e. commercial vehicles used for purposes other than freight carrying, e.g. campervans, tow trucks, ambulances and hearses) and omnibuses. Tractors, trailers and mobile plant and equipment are excluded.

Because of the multi-purpose nature of rear-door sedans it is possible for these types of vehicles to be registered as either cars or station wagons. Up to June 1976 all rear-door sedans were classified as cars. From July 1976 they have been classified according to the vehicle type recorded by the registration authority.

Vehicles on Register

The following table has been compiled to show, in summary form, the increase in motor vehicles on the register since 1910. To give a convenient measure of this growth, vehicles on the register have been related to the population (vehicles per 1 000 persons), and increases have been expressed as annual averages for each decade.

Motor Vehicles on Register from 1910, Tasmania

At 30 June	Cars and station wagons	Commercial vehicles	Motor cycles	Total	All vehicles Average annual increase (a)	Per 1 000 of population
	'000	'000	'000	'000	'000	no.
1910	0.2	(b)	0.2	0.4	—	2
1920	2.4	(b)	1.7	4.1	0.4	20
1930	12.5	2.2	4.8	19.5	1.5	89
1940	17.6	5.2	3.4	26.2	0.7	109
1950	25.3	12.9	4.9	43.2	1.7	156
1960	63.7	26.4	3.1	93.2	5.0	271
1970	118.6	32.6	3.1	154.3	6.1	398
1980	177.2	47.5	4.7	229.5	7.5	573
1982	190.0	48.8	5.8	246.6	(c)8.6	553

(a) For decade ending in year shown.

(b) Included with cars and station wagons.

(c) For two years ended 30 June 1982.

Motor Vehicles on Register in Australia

While different concepts of what constitutes 'motor vehicles on register' at a particular point of time may be appropriate for different purposes, for the purpose of obtaining uniform statistics for all states and territories, it is necessary to adopt a common concept of what constitutes 'motor vehicles on register' at a particular date. For this series, the Bureau has adopted the concept of motor vehicles on register at a particular date as being: (i) vehicles whose fees were paid up at that date, in respect of that date; and (ii) vehicles whose fees were not paid up at that date but subsequently were paid retrospectively to that date (or to an earlier date); and excluding all vehicles whose fees were not subsequently paid up in respect of that particular date, even though at that date their registrations may not have been formally terminated.

The following table shows estimated details of motor vehicles on the register for each state and territory at 30 June 1981. The figures are based on the final results of the census of motor vehicles conducted in respect of 30 September 1979 and data supplied by the various registration authorities. Diplomatic and consular vehicles and all Federal Government-owned vehicles other than those belonging to the defence services are included.

Motor Vehicles on Register, 30 June 1981

State or territory	Cars and station wagons	Commercial vehicles	Motor cycles	All vehicles	
				Total	Per 1 000 of population
	'000	'000	'000	'000	no
New South Wales	2 020.0	492.5	114.4	2 626.9	501.6
Victoria	1 632.5	339.1	64.2	2 035.9	515.6
Queensland	946.2	318.2	91.3	1 355.6	578.0
South Australia	564.9	123.8	36.7	725.5	549.9
Western Australia	552.6	187.6	33.0	773.2	595.2
Tasmania	183.4	48.5	5.4	237.3	555.3
Northern Territory	30.0	20.2	3.5	53.4	434.9
Australian Capital Territory	91.4	14.3	3.9	109.6	482.2
Total	6 021.0	1 544.3	352.3	7 917.6	530.4

Registration of New Motor Vehicles

The motor vehicle classification system used in compiling these statistics has as its main features:

- (i) the acceptance of vehicle-type data as recorded by the registration authority;
- (ii) allocation of commercial vehicles to the categories 'utilities, panel vans' or 'rigid trucks' solely on the basis of recorded body-type;
- (iii) the inclusion in 'other truck types' of campervans, tow trucks, ambulances and hearses;
- (iv) tare groupings of motor cars and station wagons, utilities, and panel vans;
- (v) gross vehicle mass (tare plus specified carrying capacity), groupings of rigid trucks;
- (vi) gross combination mass (combined tare plus specified carrying capacity) groupings of articulated trucks.

Registrations of New Motor Vehicles, Tasmania

Type of vehicle	1977	1978	1979	1980	1981	1982
Motor cars	11 878	11 439	11 271	10 810	10 259	8 796
Station wagons	2 283	2 322	2 513	2 655	2 854	2 442
Commercial-type vehicles—						
Utilities	1 365	1 269	1 163	1 595	1 700	1 264
Panel vans	1 319	1 018	840	810	974	906
Trucks—						
Rigid	1 109	1 088	894	804	471	617
Articulated	134	152	138	180	121	49
Other (a)	219	178	96	66	88	101
Buses	94	131	101	113	97	122
Motor cycles	1 118	789	1 039	1 157	1 286	989
Total	19 519	18 386	18 055	18 190	17 850	15 286

(a) Comprises non-freight carrying vehicles (e.g. tow trucks, fire engines and from 1 July 1976, campervans, ambulances and hearses).

Scrapping of Motor Vehicles

Apart from the few 'veteran' cars owned by enthusiasts, most vehicles are eventually scrapped. No information is collected on the number scrapped each year but the following table contains information from which some inferences may be drawn:

New Motor Vehicles Registered and Annual Increase in Motor Vehicles on Register, Tasmania ('000)

<i>Particulars</i>	1977	1978	1979	1980	1981	1982
New motor vehicles registered (a)	19.5	18.4	18.1	18.2	17.9	15.3
Annual increase, motor vehicles on register (b)	6.6	7.8	7.4	5.5	8.6	6.9

(a) During year ended 31 December.

(b) Annual increase measured at 31 December.

In comparing the two sets of figures in the previous table, it would be wrong to assume that the difference in each year represented scrapped vehicles only: exceptions would include vehicles transferred interstate and vehicles 'on blocks'—the fact that an owner has let a registration expire does not necessarily mean that he intends to scrap his vehicle. Subject to these and similar difficulties of interpretation, it would appear that about 17 000 motor vehicles have been scrapped during the last two years.

Registrations of New Motor Vehicles According to Make

The table that follows gives details of Tasmanian registrations of new motor cars and station wagons according to make. It illustrates the present popularity of Holden, Ford, Toyota, Datsun, Mitsubishi and Mazda makes which accounted for 92 per cent of all new motor vehicles of this type registered during 1982. In this table new motor vehicles registered which may be recorded under more than one make name (e.g. Holden or Statesman, Volkswagen or Audi) have been classified to the make recorded in the registration documents.

**Registrations of New Motor Cars and Station Wagons, Tasmania 1982
Classified by Predominant Make**

<i>Make</i>	<i>Motor Cars</i>		<i>Station wagons</i>	
	<i>Number</i>	<i>Proportion of total cars (per cent)</i>	<i>Number</i>	<i>Proportion of total station wagons (per cent)</i>
Alfa Romeo	35	0.4	—	—
Audi	13	0.1	—	—
BMW	37	0.4	—	—
Daihatsu	68	0.8	16	0.7
Datsun	736	8.4	374	15.3
Fiat	38	0.4	2	0.1
Ford	2 534	28.8	366	15.0
Holden	2 647	30.1	505	20.7
Honda	167	1.9	23	0.9
Jaguar	10	0.1	—	—
Leyland	1	—	9	0.4
Mazda	781	8.9	91	3.7
Mercedes-Benz	24	0.3	—	—
Mitsubishi	592	6.7	379	15.5
Peugeot	17	0.2	3	0.1
Renault	8	0.1	1	—
Rover	7	0.1	—	—
Saab	20	0.2	—	—
Subaru	65	0.7	284	11.6
Toyota	931	10.6	349	14.3
Volvo	54	0.6	19	0.8
Other	11	0.1	21	0.9
Total	8 796	100.0	2 442	100.0

ROAD ACCIDENTS IN TASMANIA

Scope of Statistics

With the rapid development of road transport, there has been an increase in the number of road traffic accidents; some merely involve damage to vehicles, but others result in injury or death. To evolve meaningful statistics describing these events, it has been found necessary to narrow the field of observation to those road traffic accidents which involve casualties, since most accidents resulting only in vehicle damage are not required by Tasmanian law to be reported to the police (the drivers might merely exchange names and report to their respective insurance companies). Further, there is the difficulty of fixing, in monetary terms, some valid standard for determining what degree of vehicle damage warrants inclusion of an accident in a long-term statistical series—obviously \$50 or \$200 for repairs in 1950 is not comparable with \$50 or \$200 for repairs now.

For these and other reasons, the statistics in this section are restricted to details of those road traffic accidents involving casualties requiring medical or surgical treatment, or causing death, and which were recorded by the police.

Responsibility for, and Causes of, Accidents

For the purpose of the statistics in this section, the police officer reporting the accident determines, on the basis of the evidence available, the road user or agency responsible, and also the prime cause of the accident. The fact that civil or criminal courts may later make different decisions on these matters is disregarded in these statistics; nor is any attempt made to distinguish between accidents giving rise to subsequent legal action and those not doing so.

Causes of Accidents

Causes of accidents in Tasmania are classified, for statistical purposes, in accordance with a standard list of 76 prime causes (although, in this section, only the most frequent causes are shown). Contributory causes and conflicting or incomplete evidence make precise classification difficult. No provision is made to record and classify such antecedent causes as fatigue, discourtesy, impatience or other driving faults. However, since July 1971 accidents where consumption of alcohol is involved have been given a special classification. Where the blood alcohol level of the road user considered responsible is 0.05 (grams of alcohol per 100 millilitres of blood) or greater, this is recorded separately and no cause for the accident is assigned. The same practice is followed for road users who were reported 'obviously affected by alcohol' by the police and: (i) refused breath and/or blood tests; or (ii) had a blood alcohol level under 0.05; or (iii) were not tested because facilities were not readily available. The double assumption in each such case is: (i) the road user's skills were impaired by alcohol; and (ii) this impairment was a factor contributing to the accident.

Road Traffic Accident Statistics

Summary

The following table summarises the principal statistics of road traffic accidents involving casualties for recent years.

Road Traffic Accidents Involving Casualties, Tasmania

Period	Accidents		Persons Killed		Persons Injured	
	Number	Per 10 000 vehicles registered (a)	Number	Per 10 000 vehicles registered (a)	Number	Per 10 000 vehicles registered (a)
1979	1 507	67	93	4.1	2 114	93
1980	1 571	68	100	4.3	2 133	92
1981	1 629	68	111	4.6	2 273	95
1982	1 321	53	96	3.9	1 871	75

(a) Based on average number of motor vehicles on register during period. 'Vehicles on register' is defined in the earlier section headed 'Motor Vehicle Registrations'.

Causes of Accidents—Drivers of Motor Vehicles Responsible

The next table analyses accidents for which drivers of motor vehicles were believed responsible:

Road Traffic Accidents Caused by Drivers of Motor Vehicles, Tasmania 1982
Classification by Cause

<i>Principal causes of accidents for which drivers of motor vehicles (excluding motor cycles) were responsible</i>	<i>Accidents involving casualties</i>	<i>Persons killed</i>	<i>Persons injured</i>
Accidents involving alcohol—			
Driver's blood alcohol level 0.05 (a) or greater	235	25	350
Driver refused test	10	—	15
Other cases (b)	26	3	44
Other accidents—			
Excessive speed having regard to conditions	71	8	116
Not keeping to the left	58	14	109
Not giving right of way	100	1	146
Failing to make right-hand turn with due care	41	1	54
Inexperience	34	1	52
Inattentive driving	127	1	176
Following other vehicle too closely	11	—	16
Improper overtaking	16	4	25
Infirmity of driver	9	2	12
Driver asleep or drowsy	24	—	33
Pulling out from kerb without warning	26	1	41
Failing to observe traffic sign or signal	92	1	169
Hit-run (n.e.i.)	12	2	10
Other causes (including not stated or not known)	29	4	36
Total	921	68	1 404

(a) Grams of alcohol per 100 millilitres of blood.

(b) Driver reported 'obviously affected by alcohol' by police but blood alcohol level less than 0.05, or not tested because facilities not readily available.

Road Traffic Accidents, Drivers of Motor Vehicles Responsible (a): Summary, Tasmania

<i>Accidents involving casualties</i>	<i>1977</i>	<i>1978</i>	<i>1979</i>	<i>1980</i>	<i>1981</i>	<i>1982</i>
Drivers of motor vehicles responsible—						
Number of accidents	1 119	1 171	1 081	1 105	1 115	921
Proportion of total accidents%	69.8	71.4	71.7	70.3	68.4	69.7

(a) Excludes riders of motor cycles.

Location of Accidents

The next table shows the location of accidents in the State:

Road Traffic Accidents and Casualties by Local Government Area, 1982

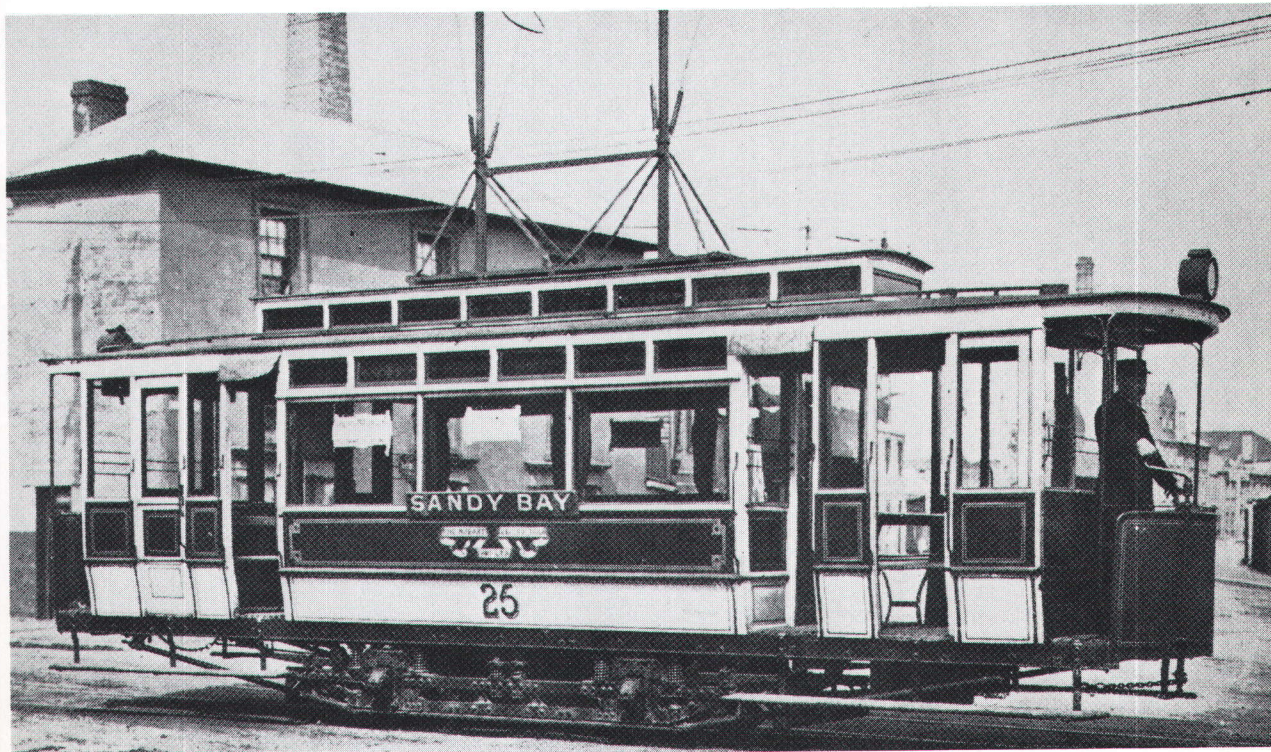
<i>Local government area</i>	<i>Accidents involving casualties</i>	<i>Persons killed</i>	<i>Persons injured</i>
Hobart	209	8	264
Launceston	154	7	211
Glenorchy	126	2	173
Clarence	70	4	96
Burnie	57	2	82
Devonport	83	6	128
Other	622	67	917
Tasmania	1 321	96	1 871



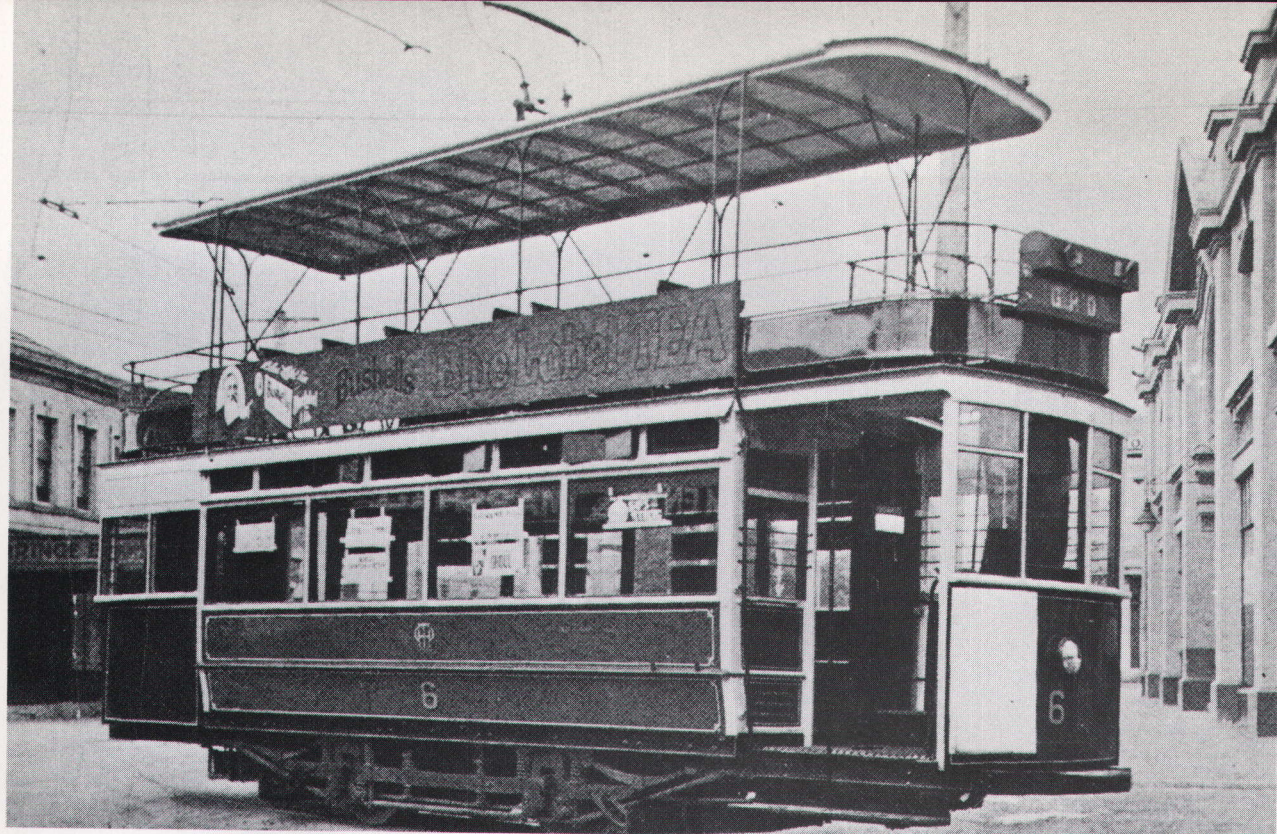
Horse-drawn passenger coach

PUBLIC TRANSPORT - HOBART 1800s - 1968

(Archives Office, Tasmania)



The Hobart Tramway Company commenced 21 September 1893 with three services: Railway Station to Cascades; GPO to Sandy Bay; and GPO to Moonah. The Hobart City Council assumed control of tram services on 3 June 1913.



Standard single truck double deck tram-car.

The Tramway system in Hobart was at its peak between 1931 and 1942 with 19 routes open to traffic. The last official regular tram ran on 24 October 1960.

Standard single deck bogie tram-car.

(Archives Office, Tasmania)





Trolley buses were introduced to Hobart on 29 October 1935 and began replacing tram routes from 1942. Hobart's public transport system was taken over by the Metropolitan Transport Trust on 1 March 1955. In 1968 trolley buses were replaced by diesel buses.

(Archives Office, Tasmania)





Devonport

TASMANIAN SEAPORTS

Burnie

(Tasmanian Government Stills Photographic Section)



Responsibility for Road Accidents

The next table shows the type of road user or agency believed responsible:

Responsibility for Road Traffic Accidents, Tasmania, 1982

<i>Responsibility attributed to—</i>	<i>Accidents involving casualties</i>	<i>Persons killed</i>	<i>Persons injured</i>
Drivers of motor vehicles	921	68	1 404
Riders of motor cycles	90	7	101
Pedal cyclists	39	3	38
Pedestrians	116	13	106
Passengers	3	—	4
Motor vehicle defects	20	1	29
Motor cycle defects	7	1	8
Pedal cycle defects	4	—	4
Animals	7	—	9
Road conditions	80	3	121
Weather	9	—	15
Parties not involved (a)	25	—	32
Not stated or not known	—	—	—
Total	1 321	96	1 871

(a) e.g. a car collides with another, after swerving to avoid a pedestrian who is not struck.

Alcohol-factor Accidents, Drivers of Motor Vehicles Responsible

The following table shows the blood alcohol level and age group of drivers of motor vehicles (excluding motor cycles) believed responsible for casualty accidents:

Road Traffic Accidents Involving Alcohol, Drivers of Motor Vehicles Responsible, Tasmania, 1982
According to Blood Alcohol Level and Age Group

<i>Blood alcohol level (a)</i>	<i>Age group of drivers responsible (in years)</i>								<i>Total</i>
	<i>Under 21</i>	<i>21-24</i>	<i>25-29</i>	<i>30-39</i>	<i>40-49</i>	<i>50-59</i>	<i>60 and over</i>	<i>Not stated</i>	
Less than 0.05	8	5	2	—	—	—	2	1	18
0.05	4	2	—	1	—	1	1	—	9
0.06	7	5	1	2	1	—	—	—	16
0.07	10	4	3	2	1	1	1	—	22
0.08	5	8	—	4	1	2	—	—	20
0.09	1	1	2	2	—	1	1	—	8
0.10	8	2	3	5	1	1	—	—	20
0.11 or 0.12	13	8	6	11	2	—	—	—	40
0.13 or 0.14	10	4	6	5	1	1	2	—	29
0.15 or 0.16	7	5	—	3	3	1	—	—	19
0.17 or 0.18	2	4	1	—	3	—	—	—	10
0.19 or 0.20	3	4	4	2	—	1	—	—	14
0.21 or 0.22	2	1	3	2	1	1	—	—	10
0.23 or 0.24	2	2	2	1	—	1	—	—	8
0.25 or above	—	1	2	5	1	—	—	—	9
Refused test	2	1	3	3	1	—	—	—	10
Test facilities not available	1	4	2	3	1	1	1	—	13
Total	85	61	40	51	17	12	8	1	275

(a) Grams of alcohol per 100 millilitres of blood.

Causes of Accidents—Pedestrians Responsible

The table below analyses road traffic accidents for which pedestrians were held responsible:

Road Traffic Accidents, Pedestrians Responsible, Tasmania, 1982
Classification by Cause

<i>Principal causes of accidents for which pedestrians were responsible</i>	<i>Accidents involving casualties</i>	<i>Persons killed</i>	<i>Persons injured</i>
Accidents involving alcohol—			
Pedestrian's blood alcohol level 0.05 (a) or greater	2	2	—
Other cases (b)	11	—	12
Other accidents—			
Walking across roadway without due care	46	4	43
Passing behind or in front of moving or stationary vehicle or object	9	1	8
Children (under seven years of age) not under, or breaking away from, the supervision of an older person	17	2	15
Running across roadway	21	3	19
Other causes (including not stated or not known)	10	1	9
Total	116	13	106

(a) Grams of alcohol per 100 millilitres of blood.

(b) Pedestrian reported 'obviously affected by alcohol' by police but blood alcohol level less than 0.05, or not tested because facilities not readily available.

Drivers Involved in Accidents, Age Group and Licence Type

During 1982 a total of 1 804 drivers of motor vehicles (excluding motor cycles) were involved in casualty accidents which were reported to the police. Of these, 24 per cent (441) were under 21 years of age and a further 30 per cent (548) were from 21 to 29 years of age.

The age group and type of driving licence held by these drivers at the time of the accident are shown in the next table:

Road Traffic Accidents, Drivers of Motor Vehicles Involved, Tasmania, 1982
According to Licence Type and Age Group

<i>Type of driving licence</i>	<i>Under 21</i>	<i>Age group of drivers involved (in years)</i>							<i>Total drivers involved</i>
		<i>21-24</i>	<i>25-29</i>	<i>30-39</i>	<i>40-49</i>	<i>50-59</i>	<i>60 and over</i>	<i>Not stated</i>	
Learner	24	4	1	—	—	2	—	—	31
Provisional	100	2	3	—	—	—	1	—	106
Ordinary	299	280	227	291	174	120	159	3	1 553
Interstate or inter-national	—	11	3	17	6	3	4	—	44
No licence	17	5	5	3	2	1	—	—	33
Not known/not applicable	1	2	5	4	2	1	1	21	37
Total	441	304	244	315	184	127	165	24	1 804

Road Features and Accidents

The following table analyses all accidents involving casualties according to road features at the site and shows that, in 1982, 31 per cent of accidents occurred on a straight section of road:

Features of Roadways on Which Accidents Occurred, Tasmania, 1982

Feature of roadway	Accidents involving casualties		Persons killed	Persons injured
	Number	Per cent of total		
At intersections—				
Cross	251	19.0	6	384
'T'	188	14.2	6	249
Roundabout	2	0.2	—	2
Other	29	2.2	1	34
Other than at intersections—				
Straight road	412	31.2	36	536
Bend or curve	408	30.9	43	618
Bridge, culvert or causeway	13	1.0	1	26
Railway level crossing	4	0.3	2	6
Other	14	1.1	1	16
Total	1 321	100.0	96	1 871

Road Users Killed or Injured

The next table analyses the type of road user killed or injured:

Type of Road User Killed or Injured, Tasmania, 1982

Types of road user involved	Killed			Injured		
	Males	Females	Persons	Males	Females	Persons
Drivers of motor vehicles	33	13	46	518	284	802
Motor cyclists	9	—	9	155	12	167
Pedal cyclists	4	—	4	53	8	61
Passengers—						
Motor vehicle	10	9	19	291	363	654
Motor cycle	—	—	—	14	11	25
Other	1	—	1	18	6	24
Pedestrians	10	7	17	83	52	135
Other	—	—	—	2	1	3
Total	67	29	96	1 134	737	1 871

Types of Accidents

Most accidents arise from collisions between vehicles, followed by accidents in which vehicles collide with fixed objects, as shown in the following analysis:

Types of Accidents, Tasmania, 1982

Type of accidents	Accidents involving casualties	Persons killed	Persons injured
Collisions—			
Angle	371	18	510
Rear end	115	3	145
Head on	121	30	223
Side swipe—Same direction	41	4	61
Side swipe—Opposite direction	31	2	42
Other	46	—	59
Vehicle—			
Overtaking or leaving road	156	6	214
Colliding with fixed object	284	17	408
Colliding with animal	6	—	6
Colliding with pedestrian	139	16	131
Passenger accidents	5	—	6
Other types	5	—	5
Other accidents	1	—	1
Total	1 321	96	1 871

Age and Responsibility

Drivers of motor vehicles (excluding motor cycles) were believed responsible for 921 out of the 1 321 accidents involving casualties which were reported to the police during 1982.

Drivers under 25 accounted for 415 or 45.4 per cent of these accidents (male drivers under 25, 325; female drivers under 25, 90).

Casualties associated with accidents attributed to drivers under 25 were: killed, 22; injured, 658.

The following table analyses the age and sex of the drivers responsible:

Road Traffic Accidents, Tasmania, 1982
Age and Sex of Drivers of Motor Vehicles Responsible (a)

Age group of drivers responsible (in years)	Male driver			Female driver		
	Accidents involving casualties	Persons killed (b)	Persons injured (b)	Accidents involving casualties	Persons killed (b)	Persons injured (b)
Under 17	6	1	11	1	—	1
17-20	213	11	362	49	1	78
21-24	106	6	157	40	3	49
25-29	82	9	131	35	1	50
30-39	97	11	136	50	3	82
40-49	50	4	71	21	—	33
50-59	37	4	44	22	1	31
60 and over	71	8	102	28	3	51
Not stated (b)	6	—	10	1	—	1
Total	668	54	1 024	247	12	376

(a) There were six accidents (two killed, four injured), where drivers of motor vehicles were responsible but where age and sex were unknown. Totals are therefore 921 accidents (68 killed and 1 404 injured).

(b) The age groups relate to the driver who may or may not be included in the casualty figures.

(c) Includes accidents for which hit-run drivers were responsible.

Age and Sex of Road Users Killed

The next table shows the age and sex of the various types of road user killed:

Road Traffic Accidents, Tasmania, 1982
Age and Sex of Road Users Killed

Age group (in years)	Type of road user killed					All road users
	Drivers of motor vehicles	Motor cyclists	Pedal cyclists	Passengers (all types)	Pedestrians	
Males						
Under 7	—	—	1	1	2	4
7-16	1	3	1	3	1	9
17-20	6	1	—	2	—	9
21-29	9	4	—	1	1	15
30-39	6	—	1	—	—	7
40-49	4	—	—	1	3	8
50-59	2	—	—	1	—	3
60 and over	5	1	1	2	3	12
Total	33	9	4	11	10	67
Females						
Under 7	—	—	—	—	—	—
7-16	—	—	—	2	1	3
17-20	—	—	—	1	1	2
21-29	4	—	—	1	—	5
30-39	3	—	—	1	—	4
40-49	4	—	—	—	—	4
50-59	—	—	—	1	2	3
60 and over	2	—	—	3	3	8
Total	13	—	—	9	7	29

Days of the Week on Which Accidents Occurred

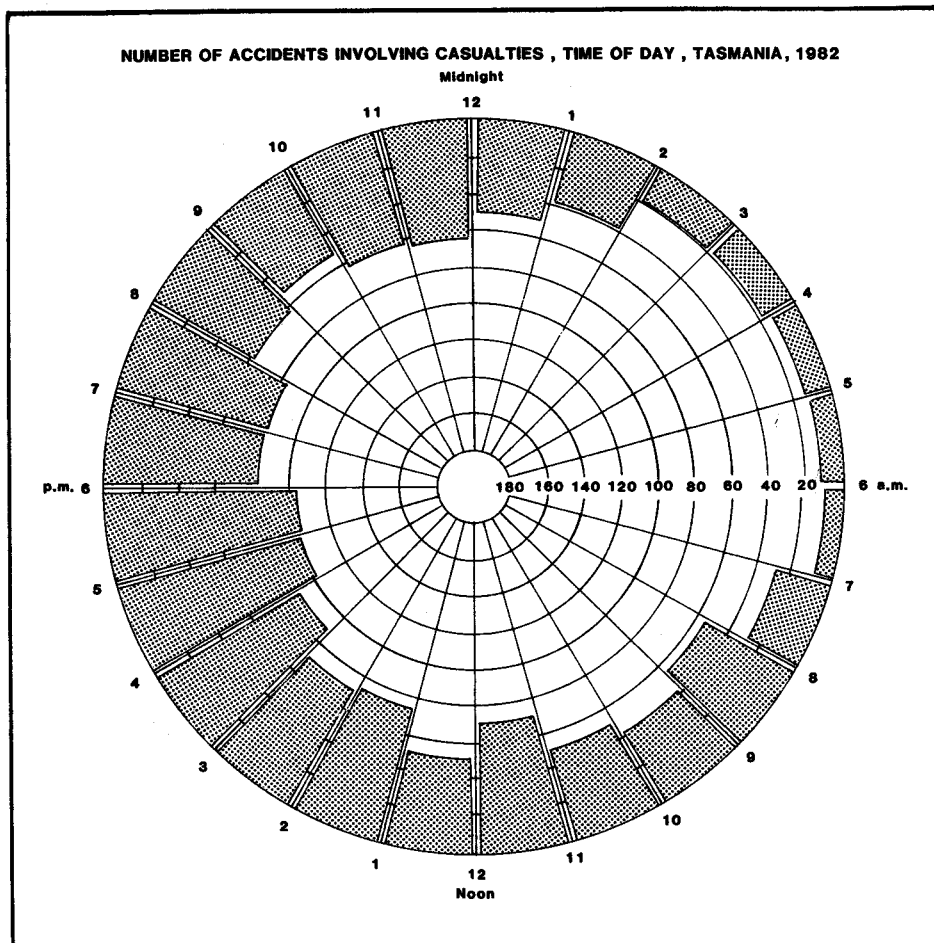
The following table shows accidents and casualties according to the day of the week on which they occurred:

Road Traffic Accidents, Tasmania, 1982
Days of the Week on Which Accidents Occurred

Day of the week	Accidents involving casualties	Persons killed	Persons injured
Monday	147	12	198
Tuesday	148	8	193
Wednesday	151	14	198
Thursday	177	14	255
Friday	231	18	345
Saturday	263	18	362
Sunday	204	12	320
Total	1 321	96	1 871

Time of Day When Accidents Occurred

The following diagram shows the time of day when accidents involving casualties occurred during 1982:



Source of Data

Details of each road traffic accident reported to the police, or investigated by the police are recorded on a standard form and copies are made available to Transport Tasmania and to the Australian Bureau of Statistics; at the Bureau, quarterly statistics are compiled only from those reports describing accidents involving casualties. Transport Tasmania employs the reports it receives in connection with road engineering, the location of traffic signs and signals, the pin-pointing of dangerous locations, traffic engineering, and accident prevention in general.

No-Fault Third Party Insurance

'No-fault' third party insurance was introduced in Tasmania on 1 December 1974 under the *Motor Accidents (Liabilities and Compensation) Act 1973*. Prior to the introduction of the 'no-fault' scheme, motorists were compelled to insure with insurance companies against claims for personal injury by other persons resulting from motor vehicle accidents. The success of a claim was dependent upon the claimant proving negligence (or fault) on the part of the driver of a motor vehicle. 'No-fault' insurance, however, entitles a person to compensation for injuries sustained in a motor vehicle accident without

regard to who was at fault. The extent of the compensation is determined by the scheduled benefits outlined in the Act. The operation of the scheme does not, however, preclude the individual from suing for damages should it be felt that the scheduled benefits are insufficient compensation and that the accident was the result of negligence. Insurance is compulsory under the Act.

Premiums

Premiums vary according to the type of vehicle and the purpose for which it is used. On 1 December 1982, the annual premium for most private passenger-type motor vehicles was \$92.00. Premiums are subject to review annually by the Premiums Board of Tasmania which was established under the Act to recommend rates of premiums to the Minister responsible.

Scheduled Benefits

The more important of the scheduled benefits prescribed in the Act are:

- (i) medical, hospital and ambulance expenses;
- (ii) disability allowances for employed persons, self-employed persons or housekeeping;
- (iii) dependant's allowance;
- (iv) death benefits;
- (v) funeral benefits.

Motor Accidents Insurance Board

The Motor Accidents Insurance Board, set up to administer the Act, consists of five members who are appointed by the Governor. The chairman, a legal practitioner, is appointed directly and each of the following organisations appoints one member: (i) the Tasmanian Government Insurance Board; (ii) the Tasmanian branch of the Insurance Council of Australia; (iii) Transport Tasmania; and (iv) the Royal Automobile Club of Tasmania (representing the interests of motor vehicle users).

AIR TRANSPORT IN TASMANIA

Introduction

1982 saw a year of changes in Tasmania's aviation history. Ansett Airlines of Australia withdrew its DC9 aircraft and replaced them with Boeing 737. IPEC introduced Australia's only DC9 pure freighter. H. C. Sleigh Aviation Ltd ceased operations. Air Tasmania Pty Ltd became Airlines of Tasmania Pty Ltd. Air New Zealand showed great interest in running B737 services between Christchurch and Hobart and commenced operating during 1983. Devonport Airport was transferred from the Commonwealth under the local ownership scheme to the Devonport Marine Board. Ansett withdrew Hobart-Christchurch services. Federal legislation with respect to commuter operations saw Airlines of Tasmania Pty Ltd becoming a Supplementary Airline with effect from 1 February 1983. Construction of the new international terminal at Hobart was completed in 1983.

During 1982 Ansett Airlines of Australia and Trans Australia Airlines continued to provide the greater percentage of passenger traffic to and from the Tasmanian mainland. East-West Airlines increased its number of services between Sydney and Hobart. H. C. Sleigh Aviation Ltd ceased commuter services leaving Airlines of Tasmania Pty Ltd to provide all commuter services within Tasmania and to Victoria.

Air freight is carried regularly between Melbourne and the major Tasmanian airports and islands, not only in the belly lockers of the regular domestic airlines, but also in a variety of aircraft including Lockheed Electras of Ansett Airlines of Australia, the quick-change Fokker F27 aircraft of Trans Australia Airlines and the DC9 of IPEC. Smaller aircraft also carry a large amount of freight across Bass Strait and to the Tasmanian islands.

Administration

Administration of the Air Navigation Act and Regulations in Tasmania

The *Federal Air Navigation Act* 1920 and associated regulations are administered for Tasmania by the Regional Director, Department of Aviation, Victoria-Tasmania Region. Regulation of aircraft and commercial operations within Tasmania is administered through the Transport Department of Tasmania under authority of the *Traffic Act* 1925. The Federal Department's more important functions include the provision and maintenance of government aerodromes and associated facilities, the licensing of aircraft operators and pilots and a responsibility for supervising all aspects of air safety.

Classification of Flying Activities

Flying activities are classified by regulation into the following well-defined categories:

- (i) *Private Operations*: Being operations in which an aircraft is used for personal transportation—private or business, aerial work for which no form of remuneration is received, carriage of persons or goods for other than hire or reward, or the carriage of goods other than for the purposes of trade.
- (ii) *Aerial Work Operations*: These operations refer to the aircraft being used for aerial survey; spotting; photography; agriculture; advertising; flying training and the cartage of goods being the property of the pilot, owner or hirer of the aircraft for purposes of trade. Within Tasmania there are five licensed flying training organisations and two aerial agricultural organisations carrying out most of the aerial work activities. Other types of aerial work are carried out by a further eight operators.
- (iii) *Charter Operations*: These refer to aircraft hired for passenger or cargo movement, not between fixed terminals or to fixed schedules. There are 14 licensed charter operators based in Tasmania.
- (iv) *Computer Operations*: These are regular public transport operations conducted in accordance with fixed schedules between fixed terminals. Operators are authorised to operate without holding airline licences by exemptions granted under Air Navigation Regulation 203. Exemptions will be replaced by Supplementary Airline Licences as from 1 February 1983.
- (v) *Regular Public Transport*: This refers to aircraft operating under an airline licensed to carry passengers and cargo according to fixed schedules and on specified routes. All services of this kind are provided to Tasmania by Ansett Airlines, East-West Airlines and Trans Australia Airlines.

Tasmanian Aerodromes

The major aerodromes in Tasmania are owned and operated by the Federal Government through the Department of Aviation. The following sections describe both Federal Government-owned and other aerodromes in Tasmania.

Federal Government-owned Aerodromes

Hobart Airport: Ranks eighth in the volume of passengers handled at Australian terminals. It was completed in 1956. Extension and strengthening of the runway, taxiway and aprons to take DC9 and Boeing 727 aircraft in full weight was completed in 1966. International operations to Christchurch, New Zealand, commenced during November 1980, with Ansett Airlines (ceased operations on 3 March 1982) and Trans Australia Airlines operating on behalf of Qantas. The airport is equipped with complex aviation aids. A new terminal and communication buildings were completed in 1976. A new international terminal was opened in 1983. It lies 18 kilometres by road from the city.

Launceston Airport: 16 kilometres south-east of Launceston, it ranks after Hobart in passenger volume but handles considerably more freight. The area control centre provides air traffic control for Tasmania via repeater stations, south on Mount Wellington and north on Mount Barrow. The airport is also used for commuter operations, flying training, light aircraft charter and aerial work operations.

Wynyard Airport: This has one sealed runway of 1 341 metres and one 1 189 metres long for regular public transport operations, charter, aerial work and private operations. It has been upgraded to handle F27 aircraft and is currently being evaluated for jet operations.

King Island Airport: Located six kilometres north-east of Currie. It has three gravel runways, night lighting and radio navigational equipment. It caters for commuter services operated by Airlines of Tasmania Pty Ltd and Kendall Airlines, as well as charter and private aircraft operations.

Flinders Island Airport: Located five kilometres north of Whitemark. There are two gravel and one grass landing strips plus an apron, taxiway, terminal and navigation aid facilities. Main services being commuter and charter operations.

Cambridge Airport: this was constructed during the early period of aviation and has four runways. The proximity of hills prevent further development and after completion of the Hobart Airport, Cambridge became a centre for light aircraft activities.

Locally Owned Aerodromes

Devonport Airport: Located 6 kilometres east of Devonport, it is owned by the Devonport Marine Board. Originally constructed in the early 1930s, it was developed to handle DC3, DC4 and Viscount aircraft in 1950. 1982 saw the commencement of work to bring the airport up to DC9-F28 jet standard. Regular F27 passenger services of Ansett and East-West, commuter services of Airlines of Tasmania Pty Ltd together with aerial work, flying training, charter and private aircraft operations are carried on from this location.

Smithton Airport: Located three kilometres west of Smithton, it is owned by Transport Tasmania. It has a sealed main runway plus lesser gravel strips and is used for regular commuter services as well as itinerant charter and private operations.

St Helens Airport: The aerodrome is owned and operated by the Municipality of Portland. A grassed strip 1 189 metres long and 91 metres wide is of sufficient dimension to permit operations by DC3 and F27 type aircraft. The aerodrome currently serves the charter, aerial work and private operation requirements for the area and has a non-directional beacon for instrument navigation.

Queenstown Airport: The Municipality of Queenstown under the local ownership plan provided an authorised landing area for light aircraft in 1937. In 1963 work commenced on the construction of a runway suitable for the operation of DC3-type aircraft, which was opened on 17 April 1966. It is served by regular commuters of Airlines of Tasmania Pty Ltd.

Strahan Airport: This airport, together with Queenstown Airport, services the West Coast of Tasmania. Opened for regular public transport operations in 1964, Strahan aerodrome was constructed under the aerodrome local ownership plan and is owned by the Municipality of Strahan.

Aircraft, Passenger and Freight Movements

The following table shows the number of scheduled aircraft movements at the principal airports in Tasmania during recent years. For the purposes of the statistics in this table a take-off is regarded as one movement and a landing as another.

Aircraft Movements: Principal Airports

<i>Year</i>	<i>Hobart</i>	<i>Launceston</i>	<i>Devonport</i>	<i>Wynyard</i>	<i>King Island</i>
1976	7 543	9 532	4 224	3 899	693
1977	8 073	10 265	3 944	4 006	707
1978	8 832	11 313	4 190	4 645	737
1979	8 555	11 550	3 856	4 367	713
1980	8 565	11 092	4 399	5 112	581
1981	8 742	10 879	3 904	4 928	(a)

(a) Regular public transport operated by Ansett Airlines of Australia ceased from 6 November 1980.

The next table shows the volume of passengers and freight handled at each airport; the following definitions apply:

Passengers: The figures are for fare-paying passengers only at each airport and are the sum of embarkations and disembarkations.

Freight: The figures are the sum of all revenue freight (including excess baggage) loaded and unloaded at each airport.

Passenger and Freight Movements: Principal Airports (a)

<i>Year</i>	<i>Hobart</i>	<i>Launceston</i>	<i>Devonport</i>	<i>Wynyard</i>	<i>King Island</i>
<i>Passengers ('000)</i>					
1976	399	299	88	85	13
1977	411	326	83	83	13
1978	448	367	81	86	15
1979	464	386	82	87	14
1980	479	390	91	90	10
1981	470	376	77	83	(b)
<i>Freight (Tonnes)</i>					
1976	8 111	13 324	363	316	114
1977	8 575	14 964	355	331	118
1978	9 588	16 794	399	380	117
1979	9 685	20 785	373	376	229
1980	9 726	21 512	321	359	155
1981	11 716	22 710	264	338	(b)

(a) See definitions preceding this table.

(b) Regular public transport operated by Ansett Airlines of Australia ceased from 6 November 1980.

The decrease in the total number of passengers carried by the principal airports (as shown in the above table) in 1981 over 1980 was five per cent. The total freight carried showed an increase of nine per cent over the same period.

Comparison of Principal Australian Airports

The next table shows the volume of activity at the principal Australian airports in terms of the number of passengers, freight and aircraft movements. Details of international services have been excluded so that comparisons are purely in terms of domestic traffic (international services are centred on Melbourne, Sydney, Brisbane and Perth).

**Passengers, Freight and Aircraft Movements
Principal Airports, Australia 1981**

<i>Airport</i>	<i>Passengers</i>	<i>Freight (tonnes)</i>	<i>Aircraft movements</i>
Sydney	5 832 918	56 353	81 489
Melbourne	5 038 312	74 379	66 500
Brisbane	2 679 524	28 347	36 311
Adelaide	1 890 364	19 251	24 378
Perth	959 930	13 166	13 910
Canberra	825 061	3 238	13 219
Coolangatta	652 551	1 565	9 681
Hobart	470 172	11 716	8 742
Launceston	375 998	22 710	10 879

FREIGHT EQUALISATION

In April 1974, Mr J. F. Nimmo was appointed by the Federal Government as a Commissioner of a 'Commission of Inquiry into Transport to and from Tasmania'. The Commission was appointed because of the widely held view that Tasmania suffered a considerable disability with regard to freight and passenger rates to and from mainland Australia compared to other states.

The Commission's Report (the 'Nimmo Report') was presented to the Government in March 1976. A summary of the Report is included in the 1977 *Year Book*. Following release of the report, the Federal Minister for Transport, on 9 June 1976, announced details of a scheme to be administered by the Tasmanian Branch of his Department for equalising the trans Bass Strait freight costs of Tasmanian manufacturers and producers who exported goods for use or sale on the mainland.

The new scheme, known as the Tasmanian Freight Equalisation Scheme (TFES), was largely based on the recommendations of the Nimmo Inquiry. In addition to providing financial compensation to Tasmanian manufacturers and producers, the aim of the scheme is to stimulate the use and development of Tasmanian resources by removing an obstacle to investment and to promote the development of a more efficient transport system.

Under the scheme, consigners of interstate goods from Tasmania are paid assistance which is intended to compensate them for the excess transport charges they incur. A separate rate of assistance is calculated for each common item of freight for each major route between Tasmania and interstate destinations. The amount of assistance is calculated as the difference in cost for door-to-door transport of the item between Tasmania and the mainland and that for transporting it over a comparable route on the mainland.

The method used in calculating assistance rates means that changes in the rate depend on the relative movements of Tasmanian and mainland transport costs. If mainland costs increase by the same amount as Tasmanian costs, TFES assistance would not change. If mainland freight rates were to increase more than Tasmanian freight rates, TFES assistance would decrease. If Tasmanian freight rates were to increase more than Mainland freight rates, then TFES assistance would increase.

Payment of assistance is made to the actual consignor of the goods, leaving him free to choose the shipping line which provides the service best suited to his needs. Prior to the introduction of freight equalisation, Government assistance for transport to and from Tasmania took the form of subsidies paid to the government shipping line, Australian National Line. This was found to seriously disadvantage private shipping lines and to encourage the use of inefficient transport arrangements. In Newfoundland, such subsidies were also found to discourage the development of local industries (see the 1980 *Year Book*, p. 556).

The TFES does not cover all consignments from Tasmania and three major categories of freight do not receive assistance payments:

- (i) bulk cargoes were excluded from the scheme on the recommendation of the Nimmo Report because they were found not to be disadvantaged relative to similar movements on the mainland.
- (ii) air cargo is not included because the Government considered that assistance would create inequities for manufacturers in comparable circumstances on the mainland. (The Nimmo Report recommended that assistance be paid on certain classes of air freight as air transport was more expensive than sea transport and Tasmanian manufacturers did not have the fast door-to-door overnight movements by road that are available to mainland manufacturers.) In its 1978 report, the Bureau of Transport Economics (BTE) recommended that further consideration be given to providing TFES assistance to certain air cargoes.

On 6 April 1982 the Federal Minister for transport announced that in the event of industrial disputes resulting in no shipping being available between Tasmania and the Mainland, the amount of subsidy payable

to consignors of sea freight under the Tasmanian Freight Equalisation Scheme will be payable to consignors in respect of air freight for those goods, northbound and southbound, that would otherwise have travelled by sea.

- (iii) overseas cargoes were not included because many overseas shipping lines paid the centralisation cost of moving containers between Tasmania and the mainland. As such arrangements do not apply to some areas of the mainland the Government felt that TFES assistance to exports would be discriminating in Tasmania's favour. However, in its 1978 Report, the BTE recommended that further consideration be given to this matter.

Associated with the introduction of freight equalisation assistance sea freight rates were restored to economic levels. This involved increases to north-bound freight rates which had been frozen since 1974 and a lesser increase in south-bound rates. TFES rates of assistance were calculated on the basis of economic freight rates being charged.

Assistance in respect of south-bound goods and equipment for Tasmanian manufacturers and producers was announced in November 1977 and made retrospective to 1 July 1976. The goods eligible for south-bound assistance must be of Australian origin and suffer an actual freight cost disability. Eligible producers are: (i) primary producers in respect of equipment and packing materials; and (ii) manufacturers and mining undertakings in respect of equipment used in the production process and raw materials input, provided that these total more than five per cent of the factory door cost of the finished product.

At the direction of the Federal Minister for Transport, the Bureau of Transport Economics re-assessed the freight disability for north-bound goods in late 1977. In recalculating the rates of assistance, the Bureau generally followed the methodology used by the Nimmo Inquiry but changed one significant aspect. While Nimmo determined rates of assistance by a comparison of the average transport costs for Tasmanian consignors for each commodity with that of their mainland counterparts, the BTE based the level of assistance on a comparison between the costs of the most efficient consignors in order to encourage efficiency. The Minister released the Bureau's report and announced new rates of assistance on 16 July 1978 which were retrospective to 1 July 1978.

In addition to recalculating rates of assistance, the Bureau introduced some small changes in the format of the Schedule of Rates in order to facilitate the preparation and payment of claims. Some commodity groups were split into two classifications to enable more exact compensation to be made and items with similar transport characteristics were grouped together to facilitate the introduction of new commodities into TFES in the future. The unit of measurement on which assistance payments are based was changed from cubic metres (shipping space) to tonnes weight for a large proportion of commodity classifications.

The BTE also made a number of recommendations for further study into various aspects of the current scheme, Tasmanian transport services and on the effect of TFES on Tasmanian industry. However, it pointed out that while the Scheme may assist industries in which Tasmania has a comparative advantage, it was also possible that it may hinder structural change by affording protection to declining industries, in which case some changes to TFES might be required.

The Bureau reviewed south-bound rates of assistance and north-bound rates for timber and livestock during 1979. The rates for sheep and cattle, and for timber, were split into sub-classifications to allow more accurate calculation of freight equalisation rates. The Minister released the Bureau's report and announced new rates on 27 February 1980. The new rates were effective from 1 March 1980, with the exception of those for north-bound timber which were effective from 1 January 1980.

In 1980, the Bureau of Transport Economics began a review of the methodology used to calculate assistance rates as part of an overall review of the Scheme which is being undertaken by the Commonwealth Department of Transport.

In June 1980 the Federal Minister for Transport released a report by the Bureau of Transport Economics which outlined an alternative method of calculating TFES subsidies which may overcome some of the problems with the current method. The report, "Tasmanian Freight Equalisation Scheme: a 'Landbridge' Approach to the Estimation of Subsidy Rates" was considered as a discussion paper only and submissions were invited from Tasmanian industry indicating their views on it. The report was not implemented as policy.

Freight Equalisation payments in 1981-82 totalled \$29 420 733, comprising 94 per cent paid to north-bound freight claimants and six per cent paid to south-bound claimants.

POSTAL AND TELECOMMUNICATIONS SERVICES

Introduction

Prior to 1 July 1975 the Postmaster-General's Department provided and controlled postal and telecommunications services in Tasmania, supported by engineering, finance and accounting, supply, personnel and administrative establishments. From 1 July 1975 control of these services has been vested in two commissions: the Australian Postal Commission (Australia Post) and the Australian Telecommunications Commission (Telecom). The activities of these bodies in Tasmania are outlined below.

Australia Post

Apart from its obvious role of providing postal services, Australia Post also acts as an agent for a number of other instrumentalities in transactions which include: Commonwealth Savings Bank deposits and withdrawals; Telecom Australia account payments; telegrams; Defence Home repayments; sale of State duty stamps; sale of income taxation instalment stamps; Medibank; State Division of Housing repayments and Australian Government bonds.

Postal Money Orders

From 21 November 1977, the postal order and money order services were replaced by a postal money order service. As well as providing a money transfer service by mail, postal money orders can also be sent by telegraph. Charges are 75 cents for amounts up to \$10, 85 cents for amounts over \$10 up to \$50, and one dollar for amounts over \$50 up to \$500. Orders for overseas are limited to \$100 and a remitter may send only one such order in any week. The charges are \$2.80 for orders of up to \$40, and seven cents for each dollar, or part of a dollar, for amounts over \$40.

The Postal Service

The first long-distance overland mail service in Australia was started between Hobart and Launceston in 1816, the carrier walking both ways and taking a fortnight for the round trip.

The number of individual postal articles handled in Tasmania in 1980-81 amounted to 64.5 million compared to 65.4 million in 1979-80. Australia Post handled 2 503 million articles throughout Australia in 1980-81 compared to 2 474 million in the previous year.

All mail to and from Tasmania and the Mainland is carried by air as far as Melbourne, priority being given to priority paid mail, standard articles and mail on which airmail fees have been paid. The balance is forwarded on an "Air Opportunity" basis. A local priority paid mail service was introduced in November 1975 and provides guaranteed delivery within Hobart and suburbs on the next working day. This service is also available between Hobart, Launceston, Devonport and Burnie. An overnight parcel service, introduced towards the end of 1976, provides for next working day delivery of all mail throughout the State, with only minor exceptions.

Australia Post also provides an Express service for urgent items in Hobart with an intrastate network extending to Launceston, Devonport, Ulverstone, Burnie and many country areas and an interstate network, which includes all state capitals and major provincial centres.

At 30 June 1981 Australia Post had a full-time staff in Tasmania of 790; 94 persons were employed part-time, 223 were employed at non-official post offices (and paid on the basis of the volume of business transacted) and 158 had mail service contracts with Australia Post. There were 505 street posting boxes in the State and 146 street delivery rounds were in operation.

Postal Services (a), Tasmania							
Particulars	Unit	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Post Offices—							
Official	no.	46	42	42	42	42	42
Non-Official	no.	222	220	215	207	244	196
Postal traffic (b)—							
Standard letters	'000	44 829	45 406	48 690	51 828	53 902	57 204
Non-standard articles	'000	5 528	5 627	7 569	12 252	10 962	6 628
Parcels	'000	220	310	342	379	444	544
Registered articles	'000	132	126	124	121	119	127
Total	'000	50 709	51 469	56 725	64 580	65 427	64 503

(a) Controlled by Postmaster-General's Department up to 1 July 1975.

(b) Number of separate articles handled.

Australian Telecommunications Commission (Telecom Australia)

Development of Telecommunications

Hobart and Launceston were linked by a telegraph line in 1857 and two years later a Bass Strait cable was in operation, only to fail in 1861. By 1869 a second cable was laid and communication with overseas countries became possible in 1872 when the Overland Telegraph was established between Adelaide and Darwin.

The first telephone line in Tasmania linked Hobart and Mt Nelson signal station in 1880, both Hobart and Launceston having exchanges by 1883. However, no link with Victoria or overseas countries was provided until 1936.

The State is now served with a network of high-capacity, high-quality trunk channels which are extended to other Australian states and linked with the Seacom and Compac cables connecting Australia to overseas countries. There are also links to the Overseas Telecommunications Commission earth satellite stations at Carnarvon, Ceduna and Moree. The State is divided into three districts (which coincide with the STD area code districts), each in the charge of a District Telecommunications Manager.

Telegraph: The teleprinter exchange (TELEX) had only one Tasmanian subscriber in 1957 but 1 007 were connected by 17 June 1981. The TELEX service is fully automatic and subscribers can now contact each other without an exchange operator's assistance. Calls can be made automatically to many overseas countries tied in with Australian telegraphic services, while the remainder can be contacted through an exchange operator. Extensive use is made of the long established picturegram service by the press; organisations such as the Bureau of Meteorology and private companies have a similar service available for the transmission of charts and documents.

Telephones: The Commission completed the conversion to automatic working of all the telephone exchanges in Tasmania on 15 June 1977. There were then 198 automatic exchanges in the State. Tasmania became the first Australian State to have a fully automatic telephone system.

Telephone and Telegraph Services

The following table analyses telephone and telegraph services in Tasmania:

Telecommunications Services, Tasmania (a)

Particulars	Unit	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Telephone—							
Services in operation (b)—							
Business	'000	36	36	36	35	36	37
Non-business	'000	69	75	81	88	96	102
Total	'000	104	111	117	124	132	138
Public telephones	'000	1	1	1	1	1	1
Instruments in operation (b) .	'000	146	155	164	174	202	192
Automatic exchanges (b)	no.	198	197	196	196	197	197
Manual exchanges (b)	no.	—	—	—	—	—	—
Value of calls made—							
Metered (local and S.T.D.)	\$'000	19 313	24 748	28 207	34 083	36 800	36 071
Trunk	\$'000	2 099	2 175	2 519	3 046	3 800	3 292
Public telephone (local and trunk)	\$'000	1 146	1 271	1 466	1 670	1 950	1 890
Telegraph—							
Phonograms lodged	'000	173	143	104	81	73	64
All telegrams lodged (c) ...	'000	298	242	178	135	122	107

(a) Telecommunications services were controlled by the Postmaster-General's Department prior to 1 July 1975.

(b) At 30 June.

(c) Includes telegrams lodged by telephone (i.e. phonograms.)

The installation in recent years, of the high-capacity trunk channels, known as the Broadband system, together with modern trunk switching exchanges, has enabled the Commission to provide Subscriber Trunk Dialling (STD) facilities for the direct dialling of trunk calls. This facility enables subscribers to make direct long-distance calls to anywhere in Australia by simply dialling the required number. All telephone subscribers in Tasmania have access to STD which avoids the delays associated with manually-operated exchanges. Charges are based on actual time used and there is no minimum time period as with manually booked trunk calls.

International Subscriber Dialling (I.S.D.) to more than 140 countries is now available upon request to 75 517 telephone subscribers throughout the State. At the end of June 1982 4 964 subscribers have availed themselves of this facility.

There is an increasing demand for facilities to transmit digital data over telephone and telegraph lines. The data can be sent over three alternative links: (i) through the telephone network; (ii) by direct point to point private telephone or telegraph lines provided exclusively for the customer; and (iii) through the telex network.

Lines suitable for high speed transmission can be provided using alternatives (i) and (ii). Originally known as 'Data Transmission', this service has been renamed 'Datel'. Digital data information must be converted into a form suitable for transmission over the lines provided by the Commission. The conversion is performed by a modulator/demodulator unit known as a 'Modem'. At 16 June 1982, 1 666 Modems were in service in Tasmania.

The 'Telefinder Radio Paging Service', which commenced in Hobart on 14 November 1977 and in Launceston on 19 February 1979 provides a point to point contact facility whereby a Telefinder subscriber carries a lightweight pocket receiver which emits an audible 'Beep' when it receives a signal broadcast from a paging radio transmitter. The alerted customer then takes some pre-arranged course of action such as contacting his office to receive information. At 16 June 1982, 930 paging units were in operation in the State.

RADIO COMMUNICATION STATIONS IN TASMANIA

The next table relates to radio communication stations only; particulars of broadcasting stations are specifically excluded and are dealt with in a subsequent section.

Number of Authorised Radio Communication Stations, Tasmania at 30 June
(Two-way Services)

Particulars	1977	1978	1979	1980	1981	1982
Fixed stations—						
Outpost (a)	9	5	4	2	2	2
Other (b)	113	136	158	204	174	165
Total	122	141	162	206	176	167
Land Stations—						
Aeronautical (c)	8	8	8	11	11	10
Base Stations for—						
Land Mobile Services (c)	798	860	884	943	1 058	904
Harbour Mobile Services (c)	30	34	40	35	39	32
Coast (d)	38	44	45	50	52	49
Experimental	27	44	44	39	35	30
Total	901	990	1 021	1 078	1 195	1 025
Mobile stations—						
Aircraft	57	71	71	93	87	88
Land Mobile Services	6 039	6 539	6 878	7 411	7 694	7 297
Harbour Mobile Services	464	731	993	924	968	1 106
Outpost	46	45	55	60	58	58
Ships	802	859	854	865	736	869
C.B. Radio Service (licences)	—	5 050	3 526	2 975	1 609	1 760
Total	7 408	13 295	12 377	12 328	11 152	11 178
Amateur Stations	256	321	376	406	452	490
Grand Total	8 687	14 747	13 936	14 018	12 975	12 860

(a) Stations established in remote localities for communication with control stations, e.g. areas not able to be serviced by Telecom Australia.

(b) For exchange of messages with other similar stations.

(c) For exchange of messages with mobile stations.

(d) Land stations for communication with ship stations.

Before establishing and operating any type of radio communication equipment it is necessary to obtain a licence from the Department of Communications (formerly the Postal and Telecommunications Department). This Department is responsible for the overall management of the radio frequency spectrum and the administering of the *Wireless Telegraphy Act* (1905-1980).

The following regulatory activities assist in the carrying out of those functions:

- (i) frequency allocation—the assignment of frequencies for use by services such as transport and delivery, taxi companies, police, fire and ambulance;
- (ii) radio frequency measurement and monitoring to ensure standards are met;
- (iii) determination of equipment standards;
- (iv) conduct of examination for Radio Operator's Certificates of Proficiency;
- (v) inspection of installations to ensure that standards are adhered to;
- (vi) the issue of licences authorising the establishment and operation of a radio communication system; and
- (vii) investigation of radio and television interference.

The radio frequency spectrum is a national resource, although it is somewhat different from other resources such as fossil fuels, forestry and minerals. Unless the radio frequency spectrum is effectively managed, then maximum use cannot be made of this resource.

An example of maximum utilization of the radio frequency spectrum is the State Disaster Radio Frequency Plan. Here, a relatively small portion of the radio frequency spectrum is shared by a large number of government and semi-government bodies. This arrangement facilitates inter-communication between mobile units of the various emergency services during such events as bush fires and floods. The plan which is unique, was created by officers of the Department following radiocommunication difficulties experienced during the disastrous 1967 bush fires in Southern Tasmania. At present approximately 2 000 mobile transceivers have access to the common disaster channel, with cost of equipment and site facilities for use with the plan estimated at \$3 million.

The following table shows the number of interference complaints received by the Department of Communications during the previous two years.

Interference Complaints, Tasmania			
Year	Broadcast	Television	Radio communication services
1980-81	342	1 086	81
1981-82	160	718	68

RADIO AND TELEVISION SERVICES

Radio broadcasting and television falls within the jurisdiction of the Federal Government and is one of the responsibilities of the Minister for Communications. Federal bodies which are directly involved include the Department of Communications, the Australian Broadcasting Commission, the Australian Broadcasting Tribunal, and the Australian Telecommunications Commission.

Types of Services

Basically the Australian broadcasting and television system consists of three types of service comprising:

- (i) national broadcasting and television stations funded by the Federal Government;
- (ii) commercial broadcasting and television stations operated by companies under licence; and
- (iii) public stations operated by corporations under licence on a non-profit basis.

Regulation

Provisions contained in the *Broadcasting and Television Act 1942* govern the establishment and operation of all stations. Department of Communications is responsible for planning of the overall system, for the submission of planning proposals for consideration by the Minister, for all matters relating to the technical operation of stations and for the investigation of interference to the transmission and reception of programs.

In relation to the national service, the *Australian Broadcasting Corporation* is required to provide programs for transmission over stations made available by the *Australian Telecommunications Commission* and to supply and operate the studio equipment necessary for the purpose. The *Australian Broadcasting Tribunal* is responsible for the licensing and supervision of the operation (other than the technical equipment) of all stations other than national stations. In particular, the Tribunal is required to conduct public inquiries into the granting of licences following the invitation of applications by the Minister, and into the renewal of licences, the setting of standards of broadcasting practices, alleged breaches of licence conditions and such other matters as the Minister may direct. Subject to the conduct of such inquiries, the Tribunal is empowered to grant, renew, suspend or revoke licences and to determine program and advertising standards applicable to licensed stations.

The National Services

The national services (both radio and television) are provided by the Australian Broadcasting Corporation which has sole responsibility for program material; the actual transmitters are operated by the Australian Telecommunications Commission.

Commercial Broadcasting

Commercial radio and television broadcasting stations are operated by companies under licences granted by the Australian Broadcasting Tribunal. Their technical operating conditions are determined by the Minister for Communications. The stations obtain income from the broadcasting of advertisements. The fee for a licence is \$200 plus an amount based on the gross earnings from advertising during the preceding financial year, assessed on a sliding scale varying from 1 per cent for amounts up to \$0.5 million to 6.0 per cent on amounts exceeding \$5.0 million.

Broadcasting Standards

Commercial radio and television stations are required to maintain standards set by the Australian Broadcasting Tribunal. These standards include requirements relating to the acceptability of program material, duration and suitability of advertisements and, in the case of television stations, special provisions relating to children's programs.

Public Broadcasting

On 5 April 1978 the Minister for Communications outlined the Government's policy objectives for public broadcasting. He stated that the system as a whole should '... cater for and reflect the widest possible spectrum of information, opinions, values and interests in Australian society ...'. He said that the aim of public broadcasting was to ensure this diversity by serving specialised audiences and providing programming choices which the national and commercial sectors were not able to provide. The new public sector, therefore, must be complementary and supplementary to the national and private sectors.

Category of Television Programs

The following table shows, as varying proportions of transmission time, the types of programs televised in Tasmania:

**Category of Television Programs by
Proportion of Transmission Time: Tasmania 1981
(Source: Australian Broadcasting Tribunal)**

<i>Program category</i>	<i>Commercial programs per cent</i>	<i>National programs per cent</i>
Cinema movies	10.7	2.3
Other drama	20.6	12.6
Light entertainment	17.4	8.3
Sport	17.7	17.5
News	6.0	6.4
Children	6.7	24.0
Family activities	2.8	0.5
Information	1.9	6.8
Current affairs	4.3	4.5
Religious matter	2.3	1.3
The Arts	—	2.7
Education	—	12.9
Advertising	9.5	—
Total	100.0	100.0

Television Stations in Operation

The next table gives details of the television stations in operation:

Television Stations in Operation, 30 June 1980

<i>Call sign and channel</i>	<i>Area</i>	<i>Transmitter location</i>	<i>Height above sea level—top of aerial (metres)</i>
<i>National</i>			
ABT 2	Hobart	Mt Wellington	1 344
ABNT 3 (a)	N.E. Tasmania	Mt Barrow	1 457
ABKT 11 (a)	King Island	Gentle Annie Hill	245
<i>Commercial</i>			
TVT 6	Hobart	Mt Wellington	1 323
TNT 9	N.E. Tasmania	Mt Barrow	1 419

(a) Transmits programs originating from ABT 2.

Relay of Television Programs from Other States

Tasmania is linked with Victoria by a broadband radio link installed by the Australian Telecommunications Commission which enables the direct relay of television programs from the mainland states.

Microwave Links, Intrastate Relays and Translator Stations

The prime sources of programs in Hobart are the commercial and national studios which are linked to their Mt Wellington transmitters (TVT 6 and ABT 2) by microwave links; the commercial studio in Launceston feeds programs to its Mt Barrow transmitter (TNT 9) by the same method. As there is no national studio at Launceston, the transmitter on Mt Barrow (ABNT 3) relays the Hobart national programs through the broadband radio link. A similar service is also available to commercial stations.

Tasmania, due to its terrain, has areas where television reception direct from the Mt Wellington or Mt Barrow transmitters is either difficult or impossible. To provide good reception in such areas, translator stations, which are low-powered stations receiving signals from a parent station and re-transmitting on a different frequency to areas with poor reception, have been installed as shown in the following table. Translator stations cannot broadcast directly. The next table shows translator stations in operation and the areas served:

Television Translator Stations in Operation at 30 June 1981

Area served	Parent station		Local channel	
	National	Commercial	National	Commercial
Burnie	ABNT 3	TNT 9	4	10
Derby .....	..	TNT 9	..	11
Lileah	ABNT 3	TNT 9	8	6
Maydena .....	..	TVT 6	..	8
Queenstown-Zeehan	ABT 2	TVT 6	4	8
Roseberry-Renison Bell	ABT 2	TVT 6	1	10
Savage River-Luina	ABNT 3	TNT 9	4	7
Smithton	ABNT 3	TNT 9	4	11
South Launceston	ABNT 3	TNT 9	1	11
St Helens	ABNT 3	TNT 9	0	7
St Marys-Fingal Valley	ABNT 3	TNT 9	1	11
Strahan	ABT 2	..	10	..
Strathgordon	ABTt2	TVT 6	5	8
Swansea-Bicheno	ABT 2	TVT 6	4	8
Taroona .....	..	TVT 6	..	8
Waratah	ABNT 3	TNT 9	2	11
Wynyard	ABNT 3	TNT 9	1	5A

Radio Stations in Operation

The following table gives details of the radio stations in operation in Tasmania:

Radio Stations in Operation at 30 June 1982

Call sign	Classification	Location	Hours of service (weekly)
7ZL	National	Hobart	137.00
7ZR	National	Hobart	133.00
7NT	National	Launceston	141.00
7QN(a)	National	Queenstown	141.00
7FG(a)	National	Fingal Valley	141.00
7SH (a)	National	St Helens	141.00
7HO	Commercial	Hobart	168.00
7HT	Commercial	Hobart	168.00
7AD	Commercial	Devonport	116.30
7BU	Commercial	Burnie	118.30
7EX	Commercial	Launceston	147.00
7LA	Commercial	Launceston	168.00
7QT	Commercial	Queenstown	77.00
7SD	Commercial	Scottsdale	116.30
7THE-FM	Public	Hobart	168.00
7HFC-FM (b)	Public	Hobart	112.00
ABC-FM	National	{ Hobart Launceston	168.00

(a) Transmits, in the main, programs originating from 7NT.

(b) Commenced operation in 1980.

Tasmania's first FM (frequency modulated) station, 7CAE-FM Hobart, began regular broadcasting in February 1977 on a frequency of 92.1 MHz. The call sign of 7CAE-FM was changed to 7THE-FM in March 1982. A second FM station (7HFC-FM), operated by the Hope Foundation Ltd, commenced regular broadcasting during 1980. The ABC's FM service was extended to Tasmania in August 1981.

Although there are areas of poor reception due to difficult terrain, most of Tasmania receives a satisfactory radio service from one or more of the above stations. In addition, the northern part of the State receives a service from some mainland stations. The structure and population distribution in the State has given rise to a regional pattern of radio stations with concentrations in Hobart and Launceston and outlying stations in the north-east, north-west and west.

Further References

ABS publications produced by the Tasmanian Office

Trade and Shipping, Tasmania (5401.6), annual.
 Motor Vehicle Registrations, Tasmania (9301.6), monthly.
 Motor Vehicle Census, Tasmania (9302.6), irregular.
 Road Traffic Accidents Involving Casualties, Tasmania (9401.6), quarterly.
 Road Traffic Accidents Involving Casualties, Tasmania (9402.6), half yearly.

ABS publications produced by the Canberra Office

Rail, Bus and Air Transport (9201.0), annual.
 Overseas Shipping (9207.0), annual.
 Registration of New Motor Vehicles (Preliminary) (9301.0), monthly.
 Motor Vehicle Registrations (9303.0), monthly.
 Motor Vehicle Registrations (9304.0), annual.
 Road Accident Fatalities (9401.0), monthly.

CHAPTER 18

PRIVATE FINANCE

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Chapter 18

PRIVATE FINANCE

BANKING AND EXCHANGE RATES

Types of Banks

General

Banks in Tasmania can be classified by ownership as follows: (i) Government—The Reserve Bank of Australia, the Commonwealth Development Bank of Australia, the Commonwealth Trading Bank of Australia and the Commonwealth Savings Bank; (ii) Private—the private trading banks and the private savings banks; and (iii) Trustee—The Savings Bank of Tasmania (previously the Hobart Savings Bank) and the Launceston Bank for Savings. The Agricultural Bank is *not* a bank for the purpose of these statistics.

For statistical purposes such a classification is not helpful since banks, both government and private, may be engaged in the same type of activity. Hence, the classification in use is one which groups banks according to their type of activity, not according to their ownership. The major banking statistics for the State are presented in two distinct series under the headings 'Trading Banks' and 'Savings Banks'.

Trading Banks

The following four institutions in Tasmania are classified, for statistical purposes, as 'trading banks': Commonwealth Trading Bank of Australia; Australia and New Zealand Banking Group; National Commercial Banking Corporation of Australia Ltd and Westpac Banking Corporation.

Savings Banks

In the 1950s, only three savings banks operated branches in Tasmania: Hobart Savings Bank (now the Savings Bank of Tasmania), Launceston Bank for Savings (both trustee savings banks) and the Commonwealth Savings Bank. The trustee savings banks date from early colonial days, the Launceston Bank opening in 1835, and the Hobart Bank in 1845.

In recent years, private trading banks have opened savings bank subsidiaries in the State, the current list of such banks being: Australian and New Zealand Savings Bank Ltd; Westpac Savings Bank; and National Australia Savings Bank Ltd.

Savings banks also offer cheque facilities to customers; however, for statistical purposes their cheque operations are included in 'savings bank statistics'.

Transactions of Trading Banks

The accompanying table summarises the principal statistics relating to all trading banks in Tasmania for a five-year period. The following definitions apply:

- (i) Deposits—a bank liabilities item. The figure is the average, for the year, of *balances* read at weekly intervals.
- (ii) Loans, advances and bills discounted, etc.—a bank assets item. The figure is the average, for the year, of *balances* read at weekly intervals.
- (iii) Debits to customers' accounts—mainly the total of all cheques drawn by customers during a given period. The figure is the average, for the year, of such weekly entries.

Transactions: All Trading Banks in Tasmania

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82
Number					
Branches open at 30 June	106	106	106	r 105	105
<i>Deposits, Advances and Debits to Customers' Accounts: Weekly Averages (\$'000)</i>					
Deposits (a)—					
Federal and State Governments	25 920	23 722	26 871	5 580	6 123
Other—					
Fixed	193 883	217 349	203 817	235 466	320 426
Current—Bearing interest	18 519	20 670	22 937	24 226	22 694
Not Bearing interest	137 451	153 439	172 284	179 985	183 162
Total	375 773	415 180	425 910	445 257	532 364
Loans, advances and bills discounted (a) (b)	250 144	300 811	345 930	394 596	432 599
Debits to customers' accounts (c) .	193 310	220 073	256 249	287 683	318 147

(a) The average, for the month or year, of *balances* read at weekly intervals.

(b) Loans, advances and bills discounted, etc.; excludes loans to authorised dealers in the short-term money market.

(c) Covers all trading banks and in addition, the Rural Credits Department of the Reserve Bank and the Commonwealth Development Bank.

The table below gives a classification of trading bank advances outstanding within Tasmania by type of borrower resident within Australia, and in total for non-residents of Australia.

Trading Banks: Classification of Advances Outstanding within Tasmania (a)
(\$'000)

Type of advance	At second Wednesday in July			
	1979	1980	1981	1982
<i>Borrowers Resident within Australia</i>				
Business advances—				
Agriculture, grazing and dairying—				
Sheep grazing	8 700	12 200	18 400	16 600
Dairying and pig raising	7 900	11 500	13 500	15 000
Other	21 600	28 200	34 600	39 200
Total	38 200	51 900	66 500	70 800
Manufacturing	43 000	54 700	57 200	35 000
Transport, storage and communication	5 700	6 500	9 400	11 000
Finance—				
Building and housing societies	300	400	200	200
Pastoral and finance companies	300	300	1 400	1 100
Hire purchase and other finance companies .	1 200	900	1 400	1 600
Other	3 000	3 400	4 000	5 400
Total	4 800	5 000	7 000	8 200
Retail and wholesale trade	54 600	55 300	60 500	60 600
Building and construction	12 400	12 900	13 500	13 600
Other business	49 600	58 300	61 100	55 300
Unclassified	3 700	4 200	3 600	15 200
Total business advances	212 100	248 600	278 900	269 700

continued next page

Trading Banks: Classification of Advances Outstanding within Tasmania (a)
(\$'000)—continued

Type of advance	At second Wednesday in July			
	1979	1980	1981	1982
<i>Borrowers Resident within Australia</i>				
Advances to public authorities (excl. Federal and state governments)	1 700	2 900	3 300	3 300
Personal advances—				
Building or purchasing own home (individuals)	17 900	19 200	20 100	20 200
All other	93 800	110 000	129 100	148 800
Total personal advances	111 800	129 200	149 100	168 900
Advances to non-profit organisations	3 100	3 700	4 300	3 500
Total advances to resident borrowers	328 600	384 500	435 600	445 400
<i>Borrowers Non-resident within Australia</i>				
Total non-resident borrowers	—	—	—	—
<i>Total Advances to Resident and Non-resident Borrowers</i>				
Grand total	328 700	384 500	435 600	445 500

(a) Figures rounded to the nearest one hundred thousand.

Interest Rates and Security Yields

The next table shows the interest rates available on fixed deposits, the interest yield from treasury notes and the yield from government securities:

Interest Rates and Security Yields, Tasmania
(Per Cent Per Annum)

Particulars	Rate			
	June 1979	June 1980	June 1981	June 1982
Trading banks—				
Fixed deposits (less than \$50 000)—				
3 months and less than 6 months	7.25-7.75	8.00-8.50	10.50-12.25	13.00-15.25
6 months and less than 2 years	7.75-8.50	8.50-10.00	11.00-12.25	13.00-15.00
2 years to 4 years	8.00-9.00	9.00-10.00	11.25-12.00	13.00-14.50
Fixed deposits (\$50 000 and over)—				
30 days to 4 years (a)	10.00	10.00	(b)	(b)
Federal Government securities yield—				
Non-rebateable bonds (c)—				
2 years	9.94	11.50	13.10	16.40
10 years	10.00	11.78	13.10	16.40
20 years	10.10	11.76	13.10	16.40
Treasury notes (issue yield)—				
13 week notes	9.02	10.84	13.31	15.47
26 week notes	9.30	10.55	13.25	16.04

(a) Subject to this maximum, actual rates are a matter between banks and their customers.

(b) Not subject to a maximum rate.

(c) Yields shown are average for week centred on last Wednesday of month and exclude effect of brokerage.

Savings Banks

The following table summarises the principal statistics relating to savings banks in Tasmania. Deposits are compiled on a basis different from that used in the case of trading banks. 'Deposits lodged' is the total inflow of deposits during the year, and 'depositors' balances' is a single liability reading taken at the end of the year.

The number of operative accounts excludes school bank accounts and small in-operative accounts. The other items in the table relating to depositors' balances, etc., relate to all accounts including school bank accounts and small inoperative accounts.

All Savings Banks, Tasmania

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82
Branches open (a) .....no.	165	165	167	168	168
Operative accounts (a) '000	632	651	695	718	741
Deposits lodged .....\$'000	1 030 820	1 185 564	1 487 842	1 791 657	2 182 955
Interest added .....\$'000	27 222	30 338	33 826	40 357	53 190
Excess of deposits over withdrawals .....\$'000	26 101	26 960	20 548	16 430	7 004
Depositors' balances (a) .....\$'000	530 457	587 755	642 129	698 917	759 111
Per head of population— Depositors' balances (a)\$	r 1 274	r 1 404	r 1 516	r 1 636	n.y.a.

(a) At end of year.

The next table gives details of housing finance transactions by savings banks in Tasmania:

Saving Banks: Housing Finance Transactions, Tasmania

Period	Loans approved to individuals for—						Cancellation of loans previously approved to individuals for housing	
	Construction or purchases of new dwellings		Purchases of established dwellings		Alter- ations and ad- ditions	Total		
	Number (a)	Amount (b) \$'000	Number (a)	Amount (b) \$'000	Amount \$'000	Amount \$'000	Number	Amount \$'000
1976-77	768	13 258	2 131	36 974	2 213	52 445	162	2 385
1977-78	779	14 767	2 113	39 617	2 752	57 136	185	2 826
1978-79	923	20 667	2 670	55 191	2 588	78 446	130	2 272
1979-80	815	18 414	2 317	48 985	2 496	69 895	136	2 348
1980-81	709	16 365	2 611	55 666	2 113	74 144	99	1 921
1981-82	527	12 177	2 082	45 180	1 926	59 283	108	1 685

(a) Number of loans for dwelling units approved for first mortgage finance only.

(b) Includes second mortgage finance to complete original purchase or construction.

Interest Rates

The next table shows the maximum rates of interest paid to depositors or charged to borrowers with home mortgages by The Savings Bank of Tasmania. Interest rates paid to depositors or charged to borrowers with home mortgages by the Launceston Bank for Savings, the Commonwealth Savings Bank and the savings bank subsidiaries of the private trading banks, may vary marginally from the rates shown in this table.

The Savings Bank of Tasmania: Maximum Interest Rates (a)
(Per Cent Per Annum)

Date of change in rate	On savings accounts (b)	On home mortgages (c)	Date of change in rate	On savings accounts (b)	On home mortgages (c)
February 1976	4.00	10.50	August 1980	4.00	10.50
March 1978	4.00	10.00	January 1981	4.00	11.50
January 1979	4.00	9.50	September 1981	4.00	12.50
May 1980	4.00	10.00			

(a) Operative from first day of month shown.

(b) From February 1966, fixed deposit rates have been 0.25 per cent greater than trading banks rates, effective on accounts to \$4 000. From \$4 001 to \$20 000 the interest rate was 6.25 per cent.

(c) Effective for all loans to \$100 000.

Overseas Exchange Rates

The next table shows average overseas exchange rates operative for recent periods:

Exchange Rates (a): Average for Period Shown, Overseas Currency Relative to Australian Dollar

Country	Unit of overseas currency	1977-78	1978-79	1979-80	1980-81	1981-82
Belgium (b)	Francs	37.88	34.93	32.87	37.85	50.32
Canada	Dollars	1.23	1.32	1.29	1.36	1.30
France	Francs	5.34	4.88	4.63	5.40	6.49
Germany, Federal Republic of	Deutsche marks	2.43	2.15	1.98	2.31	2.50
Hong Kong	Dollars	5.19	5.46	5.52	5.97	6.17
India	Rupees	9.49	9.13	8.83	9.23	9.85
Italy	Lire	976	946	916	1113	1363
Japan	Yen	271.90	225.84	257.77	246.67	252.53
Netherlands	Guilders	2.60	2.33	2.18	2.53	2.76
New Zealand	Dollars	1.12	1.07	1.13	1.23	1.36
Pakistan	Rupees	10.91	11.11	10.83	11.27	11.47
Singapore	Dollars	2.65	2.48	2.40	2.43	2.23
South Africa	Rands	0.970	0.968	0.905	0.898	1.092
Sri Lanka	Rupees	13.63	16.82	16.78	19.77	21.37
Switzerland	Francs	2.36	1.89	1.83	2.10	2.04
USA	Dollars	1.13	1.13	1.11	1.16	1.06
United Kingdom	Pound stg	0.620	0.565	0.497	0.505	0.585

(a) Average telegraphic transfer selling rates at Sydney. Average rates are not available for China, Malaysia and USSR; however, daily quotations are available on application to any trading bank.

(b) Two rates have been quoted for Belgium from 20.9.71. The rate shown for these periods is the financial rate used for trade transactions.

INSURANCE

General

Definitions

The following data on insurance are divided into life insurance and insurance other than life; i.e. fire, marine and general insurance. No distinction is made between insurance and assurance, the former term being used in all contexts.

Legislation

Section 51 of the Federal Constitution confers the necessary powers on the Federal Parliament to legislate with respect to 'insurance other than state insurance; also state insurance extending beyond the limits of the state concerned'. The principal Federal legislation affecting current insurance business is as follows:

Life Insurance Act 1945: This Act provides for uniform control throughout Australia of life insurance business other than business transacted by state government insurance offices, friendly societies and trade unions providing benefits for members and dependants. Also excluded is business in relation to superannuation benefits provided wholly by an organisation established by employers, employees or both.

Under the Act each company must maintain at least one office in each State or Territory in which it conducts life insurance business. Companies are also required to set up statutory funds in respect of their life insurance business in Australia and all amounts received in respect of this business must be paid to, and form part of, the assets of these funds. The assets of the statutory funds can only be used to meet liabilities or expenses relating to the life insurance business and, in certain circumstances, the payment of dividends to shareholders.

Insurance Act 1973: This Act restricts the right to carry on insurance business to authorised companies and Lloyd's underwriters and makes arrangements aimed at en-

sure that these are at all times financially sound. Insurance business carried on by the Federal Government, a state government or by a number of named government or semi-government authorities is exempt. The Act does not extend to life insurance business, registered medical or hospital benefits organisations and certain other bodies.

Life Insurance

Since 1947 returns lodged under the *Life Insurance Act* 1945 have been used to compile life insurance statistics. In Tasmania, the Government Insurance Board transacts a limited form of life insurance only (in respect of home mortgage repayments of purchasers of Housing Department dwellings) and tables that follow refer to operations of enterprises exclusively in the private sector. The transactions in the next table are concerned with Tasmania as the 'State of issue' of the policies, not necessarily as the 'State of risk'.

Life Insurance Transactions (Excluding Annuities), Tasmania (a)

Particulars	1976	1977	1978	1979	1980	1981
<i>Ordinary and Industrial Business (b)</i>						
New policies issued—						
Number	15 377	14 898	13 984	12 934	11 820	10 964
Sum insured	223.2	253.5	273.9	281.6	291.4	295.6
Annual premiums	3.0	3.4	3.3	3.2	3.2	3.4
Policies discontinued or reduced—						
Number	21 803	21 953	22 044	21 936	21 786	22 477
Sum insured	106.5	123.1	128.0	177.9	198.0	231.6
Annual premiums	2.3	2.5	2.6	2.7	2.7	3.5
<i>Superannuation Business</i>						
New policies issued—						
Number	3 118	2 933	2 403	1 982	2 481	3 788
Sum insured	125.8	175.8	124.2	156.9	182.8	262.3
Annual premiums	3.6	5.9	3.8	3.8	4.6	6.7
Policies discontinued or reduced—						
Number	1 995	1 979	4 307	2 014	1 549	2 122
Sum insured	47.4	61.2	62.3	59.2	84.0	127.3
Annual premiums	1.3	1.7	1.9	2.0	2.0	2.9
<i>Total Business</i>						
New policies issued—						
Number	18 495	17 831	16 387	14 916	14 301	14 752
Sum insured	349.0	429.2	398.1	438.5	474.2	557.9
Annual premiums	6.6	9.1	7.1	7.0	7.8	10.1
Policies discontinued or reduced—						
Number	23 798	23 932	26 351	23 950	23 335	24 599
Sum insured	153.9	184.3	190.3	237.1	282.0	358.9
Annual premiums	3.7	4.2	4.5	4.7	4.7	6.4
<i>New Loans Paid Over (Excluding Advances of Premiums)</i>						
On mortgage of real estate	\$'000 4 120	3 861	5 668	4 561	4 437	5 587
On companies' policies	\$'000 1 949	2 363	2 126	2 122	2 185	2 899
On other securities	\$'000 212	196	252	213	289	254
Total	\$'000 6 282	6 420	8 046	6 896	6 911	8 740

(a) These figures are annual aggregates of those published monthly in *Life Insurance, Australia* (Catalogue no. 5621.0). They are not comparable with figures published annually in *Life Insurance* (Catalogue no. 5622.0) which contains information not related to uniform accounting periods but to the companies' balance dates between 1 January and 31 December of the year shown.

(b) Industrial business refers, in the main, to policies on which the premiums are collected as regular instalments by agents on commission. As the significance of industrial insurance has been declining, and as more businesses have been transferring it to their ordinary registers, only a few businesses now maintain registers of industrial business. In order to preserve the confidentiality of these businesses' operations it has become necessary to combine the details of ordinary and industrial business.

Fire, Marine and General Insurance

Information on insurance, other than life, is compiled from returns provided by insurance companies transacting fire, marine and general insurance business in Tasmania (including the Tasmanian Government Insurance Office). Statistics that follow relate to financial years of companies ending within the period shown and to policies *issued* in Tasmania and not necessarily to those for which the risk is situated in Tasmania.

Definitions

Premiums represent the full amount receivable in respect of policies issued and renewed in the year, less returns, rebates and bonuses paid or credited to policy-holders during the year. They are not adjusted to provide for premiums unearned at the end of the year.

Claims include payments made during the year, *plus* the estimated amount of outstanding claims at the end of the year, *less* the estimated amount of outstanding claims at the beginning of the year.

Types of Insurance

The next table shows premiums and claims according to the class of insurance business transacted in 1980-81. ('Premiums' and 'Claims' have been compiled in accordance with the definitions introducing the section.)

Fire, Marine and General Insurance, Tasmania
Premiums and Claims for Each Type of Insurance, 1980-81
(\$'000)

Class of business	Premiums	Claims	Class of business	Premiums	Claims
Motor vehicle comprehensive			Travel (incl. baggage)	628	452
(a)	21 764	16 580	Plate glass	294	257
Employers' liability	17 584	14 924	Professional indemnity	72	21
Compulsory third party (b)	10 072	22 841	Livestock	245	155
Fire and sprinkler leakage	5 319	5 384	Contractors' all risks	269	98
Houseowners' and house-			Guarantee	72	7
holders' comprehensive	10 528	7 623	Product liability	69	26
Marine (hull and cargo)	2 695	2 017	Fruit crop and hailstone (c)	9	n.p.
Personal accident	2 075	1 304	Aviation (c)	n.p.	n.p.
Loss of profits	636	476	Other	2 864	1 025
Public liability	1 676	630			
Burglary	670	458			
Boiler, engineering and					
machine breakdown	1 007	743			
Loan, mortgage and lease	n.p.	n.p.	Total	78 574	75 036

(a) Includes motor cycles.

(b) Motor vehicles only. The Motor Accident Insurance Board accepted all rights, obligations and liabilities in respect of Compulsory Third Party Insurance from 1 October 1974.

(c) Confidential—included in 'Other'.

Ratio of Claims to Gross Premiums: The following table shows the ratio of claims to premiums for the more important classes of business over a three-year period:

Fire, Marine and General Insurance, Tasmania
Ratio of Claims to Premiums (a)
(Per Cent)

<i>Class of business</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Motor vehicle comprehensive (including motor cycles)	72.7	69.5	76.2
Employers' liability	60.9	86.5	84.9
Compulsory third party (b)	134.8	149.5	226.8
Fire and sprinkler leakage	82.1	129.0	101.2
Houseowners' and householders' comprehensive	75.2	71.0	72.4
Marine (hull and cargo)	79.6	70.5	74.8
Personal accident	53.9	58.1	62.8
Loss of profits	86.7	n.p.	74.8
Public liability	42.4	65.8	37.6
Burglary	52.3	54.3	68.4
Boiler, engineering and machine breakdown	69.9	108.0	73.8
All classes	76.1	86.8	95.5

(a) See beginning of section for definition of claims and premiums.

(b) Motor vehicles only.

INSTALMENT CREDIT AND OTHER FINANCING

Finance Companies

Finance Companies: In these statistics finance companies are incorporated companies mainly engaged in providing, to the general public, the following credit facilities: (i) instalment credit for retail sales; (ii) personal loans; (iii) wholesale finance; (iv) factoring; (v) other consumer and commercial loans; (vi) financial leasing of business equipment and plant; and (vii) bills of exchange.

The definitions associated with the statistics are set out in considerable detail in the bulletin *Finance Companies Transactions* (Cat. No. 5615.0) published by the Canberra Office of the Bureau.

Finance Companies: Transactions, Tasmania
(\$m)

Year	Instalment credit for retail sales	Wholesale finance	Other consumer and commercial loans		Total all contracts
			Contracts including charges (a)	Contracts excluding charges (b)	
Amount Financed					
1976-77	62.2	114.5	49.5		226.2
1977-78	61.1	118.6	48.3		228.0
1978-79 (c)	55.5	123.1	49.0		227.6
1979-80	46.9	r128.0	55.4		r230.3
1980-81	44.3	136.8	r59.7		r240.8
1981-82	44.3	138.4	58.0		240.6
Collections and Other Liquidations of Balances					
1976-77	75.7	110.4	24.0	10.2	220.3
1977-78	83.7	116.9	35.3	17.9	253.8
1978-79 (c)	85.8	123.2	47.9	14.0	270.9
1979-80	81.6	127.9	54.5	13.3	277.2
1980-81	r70.9	140.1	r60.0	r11.2	r282.2
1981-82	67.3	137.1	61.3	19.7	285.4

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Finance Companies: Transactions, Tasmania
(*\$m*)—continued

Year	Instalment credit for retail sales	Wholesale finance	Other consumer and commercial loans		Total all contracts
			Contracts including charges (a)	Contracts excluding charges (b)	
Balances Outstanding at End of Year					
1976-77	95.5	19.5	43.7	20.6	179.3
1977-78	104.0	23.6	56.9	20.4	205.0
1978-79 (c)	95.7	24.8	68.1	23.6	212.2
1979-80	86.2	r25.2	79.2	26.2	r216.7
1980-81	80.2	22.8	96.3	r26.1	225.4
1981-82	79.1	25.3	94.1	32.7	231.3

(a) Includes details of personal loans.

(b) Includes factoring.

(c) Figures for 1978-79 and subsequent years are not comparable with those for earlier years because of changes in the scope and coverage of the statistics.

The value of capital goods (business equipment and plant) leased by finance companies, over a five-year period, is shown in the table below:

Finance Companies: Business Equipment and Plant on Lease, Tasmania
(*\$m*)

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Value of goods leased during period	25.6	32.0	40.0	54.2	r58.5	45.6
Balance outstanding at end of year	46.1	63.9	87.1	116.6	146.5	148.1

In the following table the amount financed in respect of instalment credit for retail sales agreements (a single item in previous tables) is further classified by type of commodity.

Finance Companies: Instalment Credit for Retail Sales, Tasmania
(*\$m*)

Year	Amount financed during year				Cash collections and other liquid- ations during year	Balances outstand- ing at end of year
	Motor vehicles, etc.			House- hold and personal goods		
	New	Used	Total (a)	Total		
1976-77	15.2	32.3	54.7	7.5	62.2	95.5
1977-78	13.7	34.3	55.0	6.2	61.1	104.0
1978-79	9.6	31.9	48.7	6.8	55.5	95.7
1979-80	8.4	26.6	39.8	7.1	46.9	86.2
1980-81	8.5	24.4	37.3	7.0	44.3	80.2
1981-82	7.8	23.9	35.4	8.9	44.3	79.1

(a) Total also includes new and used motor cycles, boats, caravans and trailers, motor parts and accessories.

Instalment Credit for Retail Sales in Tasmania

Definitions

The statistics cover operations of all types of instalment credit schemes which relate primarily to the financing of retail sales of goods, whether the credit is advanced by finance

companies or other businesses. In general, the item 'instalment credit' is defined as relating to schemes in which repayment is made by regular pre-determined instalments. Types of schemes covered include hire purchase, time payment, budget account and personal loan schemes which relate primarily to financing of retail sales of goods. The term 'retail sales' relates only to retail sales covered by the censuses of retail establishments; other sales of goods to final purchasers (e.g. plant and equipment) are excluded.

Figures for amounts financed exclude interest, hiring charges, insurance, etc. Figures for balances outstanding and collections and other liquidations include these charges. Details are not available of these charges or of other items (e.g. rebates allowed for early payment, late payment charges and bad debts written off) which affect the reconciliation of the three main instalment credit series: amount financed, collections and other liquidations, and balances outstanding.

Statistics of amounts financed are classified by type of goods, defined as follows: (i) motor vehicles, etc.—new and used motor cars and motor cycles, boats, caravans, trailers, and motor parts and accessories; and (ii) household and personal goods—furniture, furnishings and floor coverings, domestic refrigerators, electrical goods, radios, televisions, musical instruments, bicycles, motor mowers, clothing, etc.

Instalment Credit for Retail Sales, Tasmania (a)
(Hire Purchase and other Instalment Credit)
(\$'000)

Year	Amount financed during period (b)			Balances outstanding at end of period (c)
	Motor vehicles, etc. (d)	Household and personal goods	Total all goods	
Financed by finance Companies				
1978-79	48 714	6 761	55 475	95 716
1979-80	39 814	7 116	46 930	86 164
1980-81	37 286	6 969	44 255	80 220
1981-82	35 388	8 873	44 261	79 132
Financed by Other Businesses				
1978-79	—	2 753	2 753	1 486
1979-80	—	1 048	1 048	1 495
1980-81	—	1 142	1 142	1 580
1981-82	—	1 661	1 661	2 072
Financed by all Business				
1978-79	48 714	9 514	58 228	97 202
1979-80	39 814	8 164	47 978	87 659
1980-81	37 286	8 111	45 397	81 800
1981-82	35 388	10 534	45 922	81 204

(a) Includes time payment, budget account, and personal loan schemes relating primarily to the financing of retail sales.

(b) Excludes hiring charges, interest and insurance.

(c) Includes hiring charges, interest and insurance.

(d) Types of goods included are defined under 'Definitions' preceding the table.

OTHER PRIVATE FINANCE

Friendly Societies

Scope

The details that follow refer to 'ordinary' societies, not to 'special' societies. Ordinary societies are those which provide customary sick and funeral benefits and are subject to

actuarial valuation. Special societies restrict their membership to employees of industrial parent organisations and are not subject to actuarial valuation.

Friendly Health Services (FHS): This organisation was originally established to administer medical and hospital benefit funds to which members of existing societies could contribute; funds, membership and activities of this description are excluded from statistics of ordinary friendly society activities. FHS later extended its scope to 'ordinary' society activities. Details of the latter only are included in friendly society statistics.

Membership

Friendly societies were a form of social organisation to help members meet the costs of sickness, burial, etc. at a time when government social services were either meagre or non-existent. Membership reached a maximum (over 22 000 in male lodges) in the pre-depression years but has since steadily declined. From the 1950s, there has been rapid development of various government-encouraged insurance schemes to assist families with hospital and other expenses associated with sickness; such schemes have evolved, in general, outside the framework of the friendly society movement. As there is no uniform accounting period for these societies, details are in respect of membership as at the end of accounting periods ending during the years shown.

With FHS excluded from consideration, it may be seen that: (i) a decline in membership of other ordinary societies has continued (from 6 816 members in 1962 to 1 256 in 1980); and (ii) the average age of members has continued to increase (from 36.7 years in 1920 to 70.4 in 1980).

In the following table male and female members of the FHS Sickness and Assurance Fund and Whole Life and Endowment Fund have been included.

Friendly Society Membership and Number Who Received Sick Pay, Tasmania, 1980

Particulars	Membership details					Members who received sick pay
	Financial members	Total membership (a)	Average age of members	Admissions	Departures (b)	
All societies (excl. Friendly Health Services)—						
Males	1 230	1 233	70.4	2	72	68
Females	23	23	74.0	—	—	3
Total	1 253	1 256	70.4	2	72	71
Friendly Health Services	382	382	38.4	—	4	n.a.
Total all societies	1 635	1 638	63.0	2	76	n.a.

(a) Includes financial members but not honorary members.

(b) Includes deaths.

The figures in the next table, which excludes details for FHS, show the decline in membership of other ordinary societies.

Societies, Lodges and Membership, Tasmania (a)
(Number)

Particulars	1975	1976	1977	1978	1979	1980
Societies	8	7	7	7	8	(b)4
Lodges — Male	47	35	28	23	24	13
Female	7	7	7	7	7	5
Benefit members	3 108	2 546	2 405	2 257	2 138	1 256
Financial members	3 090	2 519	2 393	2 254	2 130	1 253

(a) Friendly Health Services excluded.

(b) Revised method of calculation. Previously some amalgamated branches were double counted.

Revenue and Expenditure

The following tables show the net revenue and expenditure of friendly societies (excluding inter-fund transfers and transfers between districts and lodges) for the accounting years which ended in the years shown:

Friendly Societies (a): Net Revenue and Expenditure, Tasmania, 1980
(**\$**)

<i>Revenue</i>			<i>Expenditure</i>		
<i>Particulars</i>	<i>Total</i>	<i>Per financial member</i>	<i>Particulars</i>	<i>Total</i>	<i>Per financial member</i>
Members' contributions			Medical attendance and		
(b)	26 891	16.45	medicine	300	0.18
Interest, rent and			Sick pay	4 677	2.86
dividends	73 709	45.08	Funeral benefits	25 181	15.40
All other income	47 427	29.01	Administration	30 461	18.63
			Endowment benefits	2 260	1.38
			Other	22 110	13.52
Total	148 027	90.54	Total	84 989	51.98

(a) Includes Friendly Health Services.

(b) Includes levies.

Friendly Societies (a): Receipts, Expenditure and Accumulated Funds, Tasmania
(**\$'000**)

<i>Year</i>	<i>Net receipts (a)</i>		<i>Net expenditure (b)</i>				<i>Accumulated funds (e)</i>
	<i>Contributions and levies</i>	<i>Total (c)</i>	<i>Sick pay</i>	<i>Funeral benefits</i>	<i>Other (d)</i>	<i>Total</i>	
1977	42	180	17	37	118	172	1 452
1978	36	192	16	40	91	147	1 498
1979	34	(f)320	12	43	71	126	1 692
1980	27	148	5	25	55	85	1 096

(a) Includes Friendly Health Services.

(b) Excludes inter-fund transfers and transfers between branches within societies.

(c) Comprises: (i) income from investments; (ii) grants received by Friendly Health Services from the ordinary societies; and (iii) other revenue items not specified in the table.

(d) Includes administration and medical attention expenses and endowment benefits paid by societies to members.

(e) The accumulated funds of any year cannot necessarily be reconciled with those of the previous year because of dissolutions and other minor factors.

(f) Includes sale of land and buildings.

Registered Building Societies

Permanent Societies: These societies are both savings and deposit-receiving institutions which advance funds for home building or purchase against the security of first mortgages. Those who invest by taking shares or by making deposits are in a separate category from those who borrow to build or buy a home. The following table summarises the transactions of permanent building societies:

Permanent Building Societies, Tasmania (a)

Particulars	1975-76 no.	1976-77 no.	1977-78 no.	1978-79 no.	1979-80 no.	1980-81 no.
Operating societies	5	5	5	5	4	4
Investing shareholders	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Borrowers	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Loans—Advanced	n.p.	32 677	27 488	42 267	46 772	31 871
Repaid	n.p.	26 334	28 012	32 766	40 625	45 073
Subscriptions (b)—Received	n.p.	r230 930	r252 352	r314 539	367 477	424 482
Withdrawn	n.p.	r210 923	r235 480	r276 659	344 960	420 746
Liabilities—						
Share capital and subscriptions—						
Non-withdrawable	n.p.	n.p.	n.p.	n.p.	171 478	186 625
Withdrawable	70 286	93 355	110 075	136 854		
Reserves	2 043	2 406	2 890	3 215	3 614	4 182
Deposits	40 854	38 135	37 631	49 336	40 299	29 181
Loans	2 599	2 524	1 597	2 720	2 120	1 142
Other	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Total	117 602	137 726	154 430	193 840	218 643	222 633
Assets—						
Loans on mortgage	86 805	104 803	117 131	141 075	164 591	172 414
Land and buildings	2 532	2 671	3 384	8 208	9 243	10 785
Government securities	7 093	29 519	33 722	44 036	44 394	38 843
Other investments	19 908					
Cash and current deposits	350	143	151	253	285	361
Other	914	590	42	268	130	230
Total	117 602	137 726	154 430	193 840	218 643	222 633

(a) As there is no uniform accounting period for these societies, financial details are in respect of accounting years ending during the years shown; details relating to the number of shareholders, etc. are in respect of numbers at the end of accounting period ending during the year shown.

(b) Includes unsecured borrowings.

Terminating Building Societies (Co-operative Housing Societies)

Terminating Building Societies are societies which, by their rules, are to terminate at a fixed date or when a result specified in their rules is attained. Societies issue members one class of share and require equated monthly instalments towards share capital from members; when a member borrows to build (and only a member may borrow) he is required to pay additional equated monthly instalments, such addition constituting interest only. The regular instalments in respect of share capital are calculated to amount, with interest, to the nominal amount of the member's shares over the life of the society (say 26 or 30 years). If the member takes out shares with a nominal value of \$20 000 then his borrowing ceiling is set at \$20 000—in other words the member takes out, in nominal share capital, the amount which he wishes to borrow for home-building. In effect, the member is contributing to a sinking fund for the liquidation of his loan. The terminating societies are termed 'co-operative'.

The maximum limit of an individual loan has been increased progressively from \$8 000 (prior to August 1969) to \$25 000 (from July 1978). Societies registered prior to 1 July 1978 were bound by previous limits; societies registered after 1 July 1978 may advance up to \$25 000 to each borrower.

The following table summarises the transactions of the terminating building societies operating in Tasmania:

Terminating Building Societies, Tasmania (a)

Particulars	1977-78	1978-79	1979-80	1980-81
Number of Societies	126	135	143	108
Income—	\$'000	\$'000	\$'000	\$'000
Interest on Loans	1 061	1 096	1 003	1 110
Other interest income	17	16	5	4
Other income	159	163	189	218
Total	1 236	1 275	1 197	1 332
Expenditure—				
Interest paid	1 035	1 070	981	1 109
Other expenses	147	149	158	166
Total	1 182	1 219	1 139	1 275
Liabilities—				
Amounts paid on ordinary shares (b)	—	6	16	17
Accumulated funds (c)	424	396	299	350
Loans from:				
Banks	1 728	1 521	1 672	1 644
Commonwealth/State Home Builders' Fund (d)	13 684	13 917	14 632	15 784
Others	268	247	121	111
Other liabilities	39	39	50	40
Total	16 143	16 125	16 790	17 946
Assets—				
Amount owing on loans (e)	15 715	15 725	16 473	17 628
Other	429	400	316	318
Total	16 143	16 125	16 790	17 946

(a) As there is no uniform accounting period for these societies, financial details are in respect of accounting years ending during the years shown.

(b) For actuarial terminating building societies, borrowing members' subscriptions have been offset against 'Amount owing on loans'.

(c) Includes accumulated surpluses and deficits.

(d) Refers to loans made to societies through the Commonwealth/State Housing Agreement.

(e) Net of borrowing members' subscriptions for actuarial societies.

Credit Unions

The credit unions (co-operative credit societies) are registered under the *Co-operative Industrial Societies Act 1928*. Most credit unions have been established by trade unions (e.g. those serving teachers, hospital employees, etc.) and by church groups. Members contribute capital by taking out shares and making deposits. The aim of the societies is to make loans to members at low rates of interest.

The following table shows the societies' annual transactions:

Credit Unions, Tasmania (a)

Particulars	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
	no.	no.	no.	no.	no.	no.
Operating societies	23	23	21	19	17	15
Shareholders	28 604	30 773	32 986	37 268	42 960	48 649
	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)
Liabilities (at end of period)—						
Paid-up capital	248	282	322	362	426	483
Reserves, accumulated profits	271	613	977	1 308	1 673	2 102

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Credit Unions, Tasmania (a)—continued

Particulars	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Deposits	18 655	24 692	33 919	46 884	65 439	80 714
Other	695	746	999	1 998	2 235	3 033
Total	19 869	26 333	36 217	50 552	69 774	86 330
Assets (at end of period)—						
Loans	18 039	24 013	30 829	43 939	59 743	75 797
Cash and current deposits	1 018	1 449	5 388	4 613	6 208	4 559
Other (b)	811	871		2 000	3 820	5 974
Total	19 869	26 333	36 217	50 552	69 774	86 330

(a) As there is no uniform accounting period for these societies, financial details are in respect of accounting years ending during the years shown; details relating to the number of shareholders, etc. are in respect of numbers at the end of accounting period ending during the years shown.

(b) Includes investments and fixed assets.

Pension and Superannuation Schemes

Private Schemes

Surveys on an Australia-wide basis have revealed superannuation and/or retiring allowance schemes for employees in the private sector as follows: (i) schemes operated through life insurance offices, friendly societies and other organisations such as unit trusts; (ii) superannuation, pension and retiring allowance funds constituted by businesses; and (iii) direct payments of pensions and/or retiring allowances by the employer. No details have been released for individual states. Australian data are published in the Bureau's bulletin *Survey of Selected Private Pension Funds*.

Government, Local Government and Semi-Government Schemes

The levels of government operating in Tasmania are: (i) federal; (ii) state; (iii) local authority; and (iv) semi-government authority. In the section that follows, any pension or superannuation scheme affecting employees of the Federal Government or its instrumentalities is excluded.

Government superannuation and pension schemes are included as part of 'Private Finance' because the funds involved do not belong to any government but are actually trust moneys held on behalf of contributors. Employees of the State Government contribute to separately constituted funds to which the State Government also makes contributions. Employees of local government and semi-government authorities are covered either by separately constituted funds or by schemes operated through life insurance offices.

The first pension and gratuity scheme for State public servants, introduced in 1860, was non-contributory and short-lived, being repealed in 1863. A contributory provident fund was established under the *Civil Service Act* 1900 but this scheme was also short-lived and made way for a contributory but State-subsidised scheme established under the *Public Service Superannuation Fund Act* 1905; a year earlier, a distinct fund had been established with similar principles to serve the teaching service. The *Superannuation Act* 1938 established a new fund to serve both public servants and teachers but some pensions continued to be paid from the two funds established in 1904 and 1905. It was not until 1 July 1968 that the residual assets and pension liabilities of these older funds were transferred to the State Superannuation Fund Board. The assets transferred from the 1904 teachers' fund were \$52 990 and from the 1905 public servants' fund, \$17 103.

State Superannuation Scheme 1971: In December 1970, the *Superannuation Act* 1938 was amended to provide for adjustments to pensions in accordance with movements in the Consumer Price Index. Next, a new scheme was embodied in the *Retirement Benefits Act* 1970, the date of operation being fixed at 1 July 1971. Contributors to the

'old' scheme were given the right of election, i.e. to change to the 'new' scheme or to stay with the 'old'.

The adoption of fixed percentage contributions as the basis for the new scheme overcame the main difficulty with the more traditional type of scheme, namely the prohibitive cost of new units of contributors in the upper age brackets. The other improvement was the provision for automatic adjustment of the pension in accordance with annual Consumer Price Index movements.

Separately Constituted Funds: In the table that follows, the operations of the following schemes have been combined and summarised: (i) State Superannuation Fund; (ii) State Retirement Benefits Fund; (iii) Police Provident Fund; (iv) Metropolitan Transport Trust—Retiring Allowance and Staff Pension Funds; (v) Marine Boards' independent schemes; (vi) University of Tasmania—Non-Assurance Subscribers' Accumulation and Additional Benefits Funds; (vii) Hobart Corporation Retiring Allowance Funds; (viii) Milk Board of Tasmania Superannuation Fund; (ix) Miners' Pension Fund; and (x) State Parliamentary Superannuation Scheme.

In the following table, the principal funds included are the State Superannuation Fund and the Retirement Benefits Fund contributed to by all permanent full-time employees of the Public Service, Teaching Service, Transport Commission, Hydro-Electric Commission, Metropolitan Transport Trust, all hospitals subsidised by the State Government, and certain police officers (see notes on Police Provident Fund for details).

State, Local Government and Semi-Government Pension and Superannuation Schemes Operated Through Separately Constituted Funds, Tasmania (a)

<i>Particulars</i>	<i>1975-76</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
	<i>\$'000</i>	<i>\$'000</i>	<i>\$'000</i>	<i>\$'000</i>	<i>\$'000</i>	<i>\$'000</i>
Income—						
Contributions—						
Employees	8 416	r9 701	10 563	11 444	r12 859	14 768
Employing authorities	6 778	r9 887	r11 772	14 104	r16 361	19 220
Interest, dividends and rent	5 053	6 033	7 720	9 217	11 062	14 062
Other income	597	r1 060	r1 026	624	731	781
Total	20 845	26 680	31 081	35 389	r41 016	48 832
Expenditure—						
Pensions	8 154	10 410	r13 107	15 240	17 914	20 441
Lump sum payments—						
On retirement or death	1 262	1 700	1 542	1 657	r2 051	2 272
On resignation or dismissal	1 057	1 331	1 821	1 706	2 029	2 309
Other expenditure	660	326	r366	345	190	354
Total	11 133	r13 767	r16 839	18 948	r22 184	25 376
Total assets at end of year	67 007	79 915	94 275	r110 420	129 701	153 615
	<i>no.</i>	<i>no.</i>	<i>no.</i>	<i>no.</i>	<i>no.</i>	<i>no.</i>
Funds in operation	14	13	13	12	12	11
Contributors	17 103	17 893	r18 409	r18 386	18 704	18 919
Number of pensioners	3 712	3 909	r3 957	r4 332	4 229	4 460

(a) As there is no uniform accounting period for these funds, financial details are in respect of accounting years ending during the years shown; details relating to the number of contributors, etc. are in respect of numbers at the end of accounting periods ending during the years shown.

Police Provident Fund: The Police Provident Fund, a *closed fund* included in an earlier table, had accumulated funds of \$7 740 741 at 30 June 1982. An amendment to the *Superannuation Act* 1938, in 1963, provided that police officers appointed after 31 December 1963 were required to become contributors to the now closed State Superannuation Fund. Police officers appointed prior to 1 January 1964 could continue as contributors to the Police Provident Fund or exercise an option to become contributors

to the State Superannuation Fund. Police officers appointed on or after 1 July 1971 contribute to the Retirement Benefits Fund.

Schemes Operated Through Life Insurance Offices: A number of local government and semi-government authorities in Tasmania operate pension and superannuation schemes for their employees through life insurance offices. The next table combines and summarises the operations of such schemes. The following are the main authorities concerned: (i) Semi-government—marine boards, fire brigades, Metropolitan Transport Trust (Launceston and Burnie), University of Tasmania, ambulance boards, Society for Blind and Deaf, Museum and Art Gallery, Botanical Gardens; and (ii) Local government—the cities and municipalities. Some authorities, e.g. University, Metropolitan Transport Trust, etc., operate schemes on both bases, i.e., some through separately constituted funds, and others through life insurance offices.

Local and Semi-Government Pension and Superannuation Schemes Operated Through Life Insurance Offices, Tasmania (a)

Particulars	1975-76 \$'000	1976-77 \$'000	1977-78 \$'000	1978-79 \$'000	1979-80 \$'000	1980-81 \$'000
Income—						
Contributions—						
Employees	1 508	1 803	2 064	2 385	2 574	2 851
Employing authorities	2 446	2 982	3 253	3 796	4 102	4 504
Surrenders	362	326	363	394	1 015	740
Death claims	200	431	155	369	569	1 168
Matured policies	608	1 224	844	1 379	1 295	1 479
Other income	254	339	144	742	976	133
Total	5 378	7 104	6 821	9 066	10 530	10 876
Expenditure—						
Premiums paid to insurance companies	3 469	4 295	4 666	5 488	5 897	5 668
Benefits—						
On death or retirement	1 049	1 980	1 152	2 329	2 732	2 946
On resignation or dismissal	268	338	465	438	740	1 780
Other expenditure	36	35	210	634	770	152
Total	4 823	6 649	6 493	8 889	10 139	10 547
	<i>no.</i>	<i>no.</i>	<i>no.</i>	<i>no.</i>	<i>no.</i>	<i>no.</i>
Funds in operation	20	20	22	23	23	23
Contributors	3 451	3 549	3 592	3 709	3 613	3 671

(a) As there is no uniform accounting period for these schemes, financial details are in respect of accounting years ending during the years shown; details relating to the number of contributors, etc. are in respect of numbers at the end of accounting periods ending during the years shown.

The Parliamentary Pension and Superannuation Scheme

The *Parliamentary Retiring Allowances Act* 1955 was repealed and replaced by the *Parliamentary Superannuation Act* 1973, effective from 1 July 1973.

The previous scheme was purely contributive. It provided for a full basic rate pension for members who retired, or were defeated, after a minimum qualifying period of 15 years. Lesser rate pensions were calculated pro-rata to the length of service expressed as a fraction of 15 years; for service less than eight years, a member received only a refund of his contributions. The pension applicable was an amount equal to \$12.50 weekly, plus 34.5 per cent of Australian average weekly earnings per employed male unit (see Chapter 10 for details) in each year ended March.

Parliamentary Superannuation Act 1973

Administration of the Fund, established under the Act, is vested in the Parliamentary Superannuation Trust which consists of the President of the Legislative Council, the Speaker of the House of Assembly and the Under-Treasurer. Contribution to the Fund

is compulsory and is payable at the rate of 12 per cent of the member's parliamentary salary.

The annual rate of pension is calculated as a proportion of basic salary (see the section 'Salaries of Members of Parliament' in Chapter 3), multiplied by the ratio of the total parliamentary salary (excluding allowances) received during the period of service, to the total basic salary payable in respect of that period. The proportion of basic salary used in the calculation varies with the length of service (from 41.2 per cent of eight years service to 70.0 per cent for 20 years or more service). Members who retire or resign with less than eight years service are only entitled to a refund of their contributions.

Pension Entitlement: A member is entitled to a pension in the following circumstances:

- (i) if he ceases to be a member, for any reason, after 15 years service; or
- (ii) he has been a member for eight years or more but less than 15 years and resigns for reasons which the Trust certifies to be 'good and sufficient'; or
- (iii) he has been a member for eight years or more but less than 15 years, his term of office expires and he fails to be re-elected for one of several reasons specified in the Act; or
- (iv) he is forced to retire for medical reasons (under these circumstances a member with less than eight years service may be entitled to a pension calculated as though he had served for eight years).

These general provisions of contributions and rate of pension may be varied in cases where the Trust sees fit and which are in accordance with the Act. Any appeal against a decision of the Trust is heard by the Supreme Court of Tasmania.

The next table gives details relating to the State Parliamentary Superannuation Scheme for recent years:

State Parliamentary Superannuation Scheme, Tasmania
(*\$'000*)

<i>Particulars</i>	<i>1975-76</i>	<i>1976-77</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>
Income—						
Contributions—Members	127	145	158	172	187	203
Government	301	(a) 1 109	1 181	1 645	1 762	2 396
Total	428	1 253	1 339	1 817	1 950	2 599
Expenditure—						
Pension payments	423	558	707	748	893	963
Other	1	30	1	1	45	33
Total	424	588	709	749	938	995
Assets at end of year—						
Cash	6	672	669	887	642	1 221
Other	—	—	650	1 508	2 770	3 801
Total	6	672	1 319	2 394	3 413	5 022
Liabilities	—	—	17	24	31	36
Accumulated funds	6	672	1 302	2 371	3 382	4 986
	<i>no.</i>	<i>no.</i>	<i>no.</i>	<i>no.</i>	<i>no.</i>	<i>no.</i>
Contributors at end of year	54	54	54	54	54	54
Pensioners at end of year	40	48	50	51	56	55

(a) Increase due to transfer of additional funds from Consolidated Revenue on the recommendation of the Actuary, to ensure solvency of the scheme.

Real Estate Transactions

Title to Land

When acquiring land today, the buyer needs to know whether the documents are under the 'old system' or the 'new system'. The new system dates from the *Real Property Act* 1862 when Tasmania introduced an adaptation of the Torrens system (Sir Robert Torrens' *Real Property Act* became law in SA in 1858). The Torrens system provides that the matter of title to land shall be a government responsibility. Each piece of separately-owned land is represented by a certificate of title which, with a few minor exceptions, is guaranteed by the State; in Tasmania, the issue and registration of titles is the responsibility of the Lands Titles Office. A statutory assurance fund is maintained to indemnify owners against loss through error.

Land alienated before 1862 was not subject to the provisions of the *Real Property Act* and transactions involving such land are still being recorded under the *Registration of Deeds Act* (the first *Tasmanian Deeds Act* was made in 1827); this is the old 'system', involving complicated conveyancing, searching, etc. The conveyance is merely evidence of ownership as between the parties to the agreement and lacks the element of conclusive proof inherent in the new system under which the Torrens certificate of title proclaims 'that the person mentioned in it is owner of the land there-in described as against all the world'. Put another way, land passing from A to B, and then to C under the old system requires a search to ascertain the validity of B's ownership and then A's ownership; under the new system, C's certificate of title is adequate proof without any reference to A and B.

The dual system persists to this day but the *Local Government (Registered Titles) Act* 1966 provided that all new sub-divisions of land should be brought under the *Real Property Act* without charge. Fees on voluntary applications to bring land under the *Real Property Act* have also been abolished to encourage other owners to change to the Torrens system.

Property Sales and Mortgages

Sales of real estate and mortgages on the security of real estate, involve either certificates of title, under the new system, or deeds, conveyances, etc. under the old system. In the following table, sales and mortgages, recorded both under the *Real Property Act* and the *Registration of Deeds Act*, are combined to give a single series showing real estate transactions in Tasmania for recent years:

Real Estate Transactions, Tasmania (a)

Year	Property sales		Mortgages			
	Number	Total	Registered		Discharged	
		consideration	Number	Amount	Number	Amount
		\$'000		\$'000		\$'000
1975-76	16 493	289 091	14 323	216 468	11 237	67 872
1976-77	16 319	301 839	14 989	217 298	11 229	77 903
1977-78	14 161	259 367	13 899	228 525	9 894	78 912
1978-79	14 913	314 206	15 384	297 975	11 047	134 220
1979-80	15 532	375 184	15 234	335 886	11 745	179 252
1980-81	15 455	405 909	14 646	335 301	11 863	134 839

(a) Registered under the *Real Property Act* and *Registration of Deeds Act*.

Further References*ABS Publications Produced by the Tasmanian Office*

Friendly Societies, Report on, Tasmania (5603.6), annual.

ABS Publications Produced by the Canberra Office

Savings Banks (Preliminary) (5602.0), monthly.

Banking (5605.0), quarterly.

Housing Finance For Owner Occupation, Savings Banks and Trading Banks (5608.0), monthly.

Housing Finance For Owner Occupation, Permanent Building Societies (5610.0), monthly.

Credit Unions: Assets, Liabilities, Income and Expenditure (5618.0), annual.

General Insurance (5620.0), annual.

Life Insurance (5621.0), monthly.

Life Insurance (5622.0), annual.

Instalment Credit for Retail Sales (5631.0), monthly.

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Chapter 19

AUSTRALIAN NATIONAL ACCOUNTS AND ECONOMIC STATISTICS

AUSTRALIAN NATIONAL ACCOUNTS

Introduction

National accounting aims at providing a systematic summary of the transactions taking place in the economy, especially of those that relate to the production and use of goods and services, and to transfers of income or capital between sectors of the economy. National accounts statistics therefore provide a medium for describing or analysing the forces that drive and shape the economy.

Estimates of national income and expenditure are compiled by the Bureau and presented in a regular sequence of national accounts publications, in which the first estimates for the year just completed are successively revised and additional detailed tables are issued as further information becomes available. The cycle begins in August with the Budget White Paper *National Income and Expenditure* (5213.0) which gives preliminary estimates for the year just completed and later estimates for the previous four years. The June quarter issue of *Quarterly Estimates of National Income and Expenditure* (5206.0) follows shortly after this with estimates for quarters for the year just completed and for the previous two years. Issues for subsequent quarters may revise the past quarterly estimates as they add additional quarters and may revise annual estimates for some items for the most recent years. The majority of revisions are the result of changes in principles and definitions rather than the correction of errors. *Australian National Accounts, National Income and Expenditure* (5204.0) is the most comprehensive national accounts publication; after estimates for this publication are finalised about February and sent for printing, mimeographed *Preliminary Statements* are issued which make available selected tables in advance.

Description of National Income and Expenditure Accounts

A brief description of the conceptual basis of national accounts is given in the 1977 *Year Book*, but for a more detailed treatment of the concepts and structure of the Australian National Accounts reference should be made to the 1976-77 issue of *Australian National Accounts, Concepts, Sources and Methods* (Cat. No. 5216.0)

Australian National Accounts Statistics

The next table gives details of the items on the receipts side of the domestic production account for recent years. Estimates of gross domestic product at average 1979-80 prices are also included. Such estimates are described as *estimates at constant prices* and are designed to remove the direct effect of price changes from the original (current prices) estimates. Estimates at constant prices are largely based on the application of specially constructed price indexes. All estimates shown below are expressed in current prices unless otherwise stated. They have been taken from the 1980-81 issue of *Australian National Accounts, National Income and Expenditure* (5204.0) and are subject to revision.

Gross Domestic Product, Australia

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81
Wages, salaries and supplements	\$m				
Gross operating surplus—					
Trading enterprises—					
Companies	\$m				
Unincorporated enterprises ..	\$m				
Dwellings owned by persons ..	\$m				
Public enterprises	\$m				
Financial enterprises	\$m				
Less Imputed bank service charge	\$m				
Gross domestic product at factor cost	\$m				
Indirect taxes less subsidies	\$m				
Gross domestic product \$m	83 144	90 251	102 070	114 464	131 055
Percentage increase in GDP (a) ...	14.2	8.5	13.1	12.1	14.5
GDP at average 1979-80 prices—					
Value	\$m				
Percentage increase (a)	2.8	0.9	4.6	1.3	4.1
GDP implicit price deflator—					
Index number (1979-80 = 100.0)	77.6	83.5	90.3	100.0	109.9
Percentage increase (a)	11.0	7.6	8.1	10.7	9.9
Gross farm product	\$m				
Gross non-farm product	\$m				

(a) Over previous year.

Implicit Price Deflators: Indexes such as the gross domestic product implicit price deflators are obtained (to the base: year used as base for the constant prices series = 100) by dividing aggregate flows of goods and services measured at current prices by the corresponding estimates at constant prices and multiplying by 100. Implicit price deflators have limitations as indicators of price change as they can be affected by the physical composition of the aggregates and components to which they refer (they are *not* 'fixed weight' indexes), and by seasonal factors, and the aggregates are subject to revision. These limitations render implicit price deflators of limited value in assessing quarterly price changes but are seldom of great significance with regard to annual national accounting aggregates.

The next table shows details for items making up the receipts side of the general government income and outlay account. Percentage increases are also shown for major items, the consumer price index (six state capitals combined), and the GDP implicit price deflator. The latter give some perspective to the monetary values (current prices) which are subject to growth due to price increases as well as being subject to *real* growth in the preceding table. In 1980-81 total 'General government receipts' as a proportion of gross domestic product was 33.5 per cent compared with 31.4 per cent in 1975-76.

General Government Income and Outlay Account, Australia: Receipts *r*

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81
Amount (\$ million)					
Income from public enterprises	1 193	1 390	1 659	1 857	2 059
Interest, etc., received	804	993	1 030	1 311	1 495
Indirect taxes	10 090	10 840	12 672	14 889	17 189
Direct taxes on income—					
Companies	2 803	3 072	3 002	3 360	4 639
Households	11 047	12 122	12 797	15 040	17 543

continued next page

General Government Income and Outlay Account, Australia: Receipts *r*—continued

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81
<i>Amount (\$ million)</i>					
Withholding taxes	96	118	114	141	161
Other direct taxes, fees, fines, etc.	785	843	850	816	837
Total receipts	26 818	29 378	32 124	37 414	43 923
<i>Percentage Increase Over Previous Year</i>					
Indirect taxes	13.7	7.4	16.9	17.5	15.4
Direct taxes on income—					
Companies, etc.	11.9	9.6	– 2.3	11.9	38.1
Households	19.9	9.7	5.6	17.5	16.6
Total receipts	17.2	9.5	9.3	16.5	17.4
Consumer price index (a)	14.0	9.4	8.2	10.1	9.4
GDP implicit price deflator	11.0	7.6	8.1	10.7	9.9

(a) Weighted average for the six state capital cities (all groups).

National Accounts Statistics Relating to Tasmania

The following tables are included to provide information relating to household income and private final consumption expenditure within Tasmania during the last six years, together with an analysis of Tasmanian farm income during the same period. Two tables which show Tasmanian figures relative to those of the other Australian states are also included. Relevant definitions are given below:

Household Income is the total income, whether in cash or kind, received by persons normally resident in Australia. It includes both income received in return for productive activity (such as wages, salaries and supplements, incomes of unincorporated enterprises, etc.) and transfer incomes (such as cash social service benefits, interests, etc.). Household income also includes any property income received by non-profit organisations such as private schools, churches, charitable organisations, etc. That part of farm income accruing to unincorporated enterprises is included under household income.

Farm Income is the difference between the gross value of farm production (after stock valuation adjustment) and total costs (i.e. production costs plus net rent and interest paid and third party insurance transfers) incurred.

Private Final Consumption Expenditure covers the expenditure on goods and services by persons and expenditure of a current nature by non-profit organisations serving households. Goods and services purchased by businesses or general government are excluded. It excludes the purchase of dwellings and capital expenditure by non-profit organisations.

Household Income: Tasmania *r*

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81
Wages, salaries and supplements .....\$m	1 251	1 345	1 458	1 671	1 900
Income of farm unincorporated enterprises .....\$m	59	66	118	111	96
Income of other unincorporated enterprises .....\$m	166	178	182	180	198
Income from dwellings .....\$m	46	58	64	70	72
Transfers from general government .....\$m	237	266	291	315	357
All other income .....\$m	170	200	226	262	320
Total household income .....\$m	1 929	2 113	2 339	2 609	2 943
Less Income tax payable .....\$m	309	323	350	406	n.a.
Other direct taxes fees, fines, etc. ....\$m	19	19	21	19	n.a.

continued next page

Household Income: Tasmania *r*—continued

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81
Consumer debt interest .....\$m } Transfers overseas .....\$m }	25	32	33	36	n.a.
Household disposable income— Amount .....\$m	1 576	1 739	1 935	2 148	n.a.
Percentage increase (a)	17.5	10.3	11.3	11.0	n.a.

(a) Over previous year.

Household Income by States, 1980-81

NSW	Vic	Qld	SA	WA	Tas	ACT	NT	Australia
Total Income (\$ million)								
39 343	29 822	15 780	9 429	9 246	2 943	2 075	1 031	109 669
Income Per Head of Mean Population (\$)								
7 561	7 589	6 837	7 181	7 192	6 920	9 317	8 514	7 406

Farm Income: Tasmania *r*
(\$ million)

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81
Gross value of farm production— Wool (including skin wool)	35	37	42	51	51
Livestock slaughtering	46	55	92	100	96
Grain crops	4	3	5	4	5
Fruit	13	15	19	19	19
Other crops	41	38	54	48	54
Other livestock products	37	39	48	46	48
Total	176	187	260	268	273
Less Stock valuation adjustment	—	—	—	—	—
Less Production costs other than wages and depreciation— Marketing costs	15	18	27	27	115
Seed and fodder	18	15	14	19	
Other costs	42	42	50	56	
Gross farm product at factor cost	101	112	169	166	158
Indirect taxes less subsidies	6	4	6	7	12
Gross farm product at market prices	107	116	175	173	170
Less Depreciation	10	11	12	14	59
Less Wages, net rent and interest paid and third party insurance transfers	31	34	36	38	
Less Indirect taxes less subsidies	6	4	6	7	12
Farm income	60	67	121	114	99
Percentage Increase (of Total) Over Previous Year					
	114.3	11.7	80.6	— 5.8	— 13.2

Private Final Consumption Expenditure: Tasmania *r*
(\$ million)

Particulars	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	
						Amount	Per cent
Food	191	220	251	291	329	369	18.3
Cigarettes and tobacco	32	35	36	39	44	47	2.3
Alcoholic drinks	70	78	92	99	106	114	5.6
Clothing, etc.	105	121	137	146	149	160	7.9
Health	69	77	83	102	107	122	6.0
Rent	135	165	194	219	240	266	13.2
Gas, electricity, fuel	36	40	46	55	57	61	3.0
Household durables	117	132	137	138	134	144	7.1
Newspapers, books, etc.	22	25	32	36	40	45	2.2
All other goods, n.e.i.	51	59	65	76	84	94	4.7
Travel and communication	186	218	233	258	299	334	16.6
All other services	146	172	193	215	238	262	13.0
Total	1 160	1 342	1 499	1 674	1 827	2 018	100.0
Percentage Increase (of Total) Over Previous Years							
	16.8	15.7	11.7	11.7	9.1	10.5	..

Private Final Consumption Expenditure: States, 1980-81 *p*
(\$ million)

Particulars	NSW and ACT	Vic	Qld	SA and NT	WA	Tas	Australia	
							Amount	Per cent
Food	4 949	3 671	2 175	1 331	1 326	369	13 821	17.6
Cigarettes and tobacco ..	625	393	225	164	127	47	1 581	2.0
Alcoholic drinks	1 954	989	694	365	399	114	4 515	5.7
Clothing, etc.	2 288	1 509	792	547	470	160	5 766	7.3
Health	1 995	1 273	623	468	380	122	4 861	6.2
Rent	5 307	3 460	1 726	1 141	980	266	12 880	16.4
Gas, electricity, fuel	547	554	234	155	136	61	1 687	2.1
Household durables	2 479	1 589	987	606	560	144	6 365	8.1
Newspapers, books, etc.	564	345	232	116	110	45	1 412	1.8
All other goods, n.e.i. ..	1 384	962	542	338	296	94	3 616	4.6
Travel and com- munication	4 917	3 242	1 943	1 103	1 054	334	12 593	16.0
All other services	3 965	2 437	1 319	792	737	262	9 512	12.2
Total	30 974	20 424	11 492	7 126	6 575	2 018	78 609	100.0
Percentage Increase (of Total) Over 1979-80								
	13.1	11.8	14.9	12.1	12.7	10.5	12.8	..

INCOME TAX RATES

Introduction

As noted in Chapter 4, income tax was first introduced in Australia in the colony of South Australia in 1884 and by 1915 had been adopted by all state governments and the Federal Government. Uniform income taxation throughout Australia was first adopted in 1942 when the Federal Government became the sole authority levying this tax. This continued until 1977-78 when, under new federal-state income tax sharing arrangements, each state was given the right to impose a surcharge or grant a rebate on personal income tax levied in its state. (However, no state government had exercised this option by the close of 1982.)

This section sets out income tax rates that apply to companies and details of the personal income tax system. (The 1977 *Year Book* included an outline of personal income tax in Australia for the period 1954-55 to 1976-77, pp. 654-662.)

Taxable Income: Expenses incurred in producing assessable income, certain specified deductions and losses incurred in previous years may be allowable deductions in calculating taxable income.

Company Income Tax

For the income years 1976-77 to 1982-83, company tax rates were set at 41 per cent of taxable income for non-profit friendly society dispensaries and 46 per cent for all other companies. From the 1983-84 income year, however, dispensaries will be taxed in the same way as other non-profit companies.

It is noted that the tax payable by companies during the financial year 1982-83 is based on income derived during the year ended 30 June 1982 or substituted accounting period.

Public Unit Trusts

The *Income Tax Laws Amendment Bill (No. 3) 1981* amended the income tax law to remove the taxation advantage sought by companies by placing income producing property in the hands of unit trusts. As a result unit trusts created by this practice are now treated as if they were companies for taxation purposes; that is they are subject to the tax rate applicable to companies generally (now 46 per cent) and distributions to unit holders out of the income and profits of such trusts are taxed in the same way that they would be if they were dividends paid to shareholders of a company.

The new basis for taxing public unit trusts and their unit-holders was first applied for the 1980-81 income year where the trust was established after 11 July 1980. For trusts established on or before 11 July 1980, the amendments will apply from the commencement of the 1983-84 income year.

Taxation (Unpaid Company Tax) Assessment Bill 1982

This legislation imposes a liability to a recoupment tax on the former owners of shares in companies that were subject to company stripping procedures which rendered those companies unable to pay their income tax liability and also imposes a liability on the promoters of the stripping schemes equal to 20 per cent of the former shareholders liability.

The legislation applies to schemes entered into between 1 January 1972 and 4 December 1980.

Retention Allowances of Private Companies

Under Division 7 of the *Income Tax Assessment Act*, a private company becomes liable to additional tax if it does not distribute a prescribed proportion of after-tax taxable income. The purpose of the provision is to maintain, as far as practicable, equity of treatment between shareholders in private companies and persons who operate unincorporated businesses as sole traders or partnerships. Without such a provision, extensive tax minimisation, by retention of profits in the private company's hands, would be expected where the rate of company tax (currently 46 per cent) is well below the maximum marginal rate of tax on individuals (60 per cent for 1982-83).

The 1979-80 Federal Budget increased the retention allowance in respect of trading profits from 60 per cent in 1978-79 to 70 per cent from the 1979-80 income year while the 1982-83 Federal Budget increased the allowance to 80 per cent from the 1982-83 income year, thus placing more funds at the direct disposal of private companies for the purposes of expansion and development. The allowance in respect of property income other than private company dividends remains at 10 per cent while the allowance in respect of private company dividend income remains at zero.

Introduction of Personal Tax Indexation

In a statement read to the House of Representatives on 20 May 1976, the Federal Treasurer announced the introduction of full personal income tax indexation from 1 July 1976. Tax indexation was to be applied for income years ending on 30 June on the basis of the percentage change in the Consumer Price Index (for the six state capitals) for the latest year ended 31 March over the preceding year ended 31 March, adjusted to offset the effect of changes in indirect taxes on the index. (The Consumer Price Index number for a year ending 31 March is the average of the four quarterly CPI numbers for that year.) Indexation changes were to be applied in respect of the tax scale (taxable income brackets), the general (minimum) concessional tax rebate, dependant rebates and the maximum separate net income which does not affect dependant rebate levels. The indexation factor applied to the 1975-76 taxable income brackets, dependant rebates and the general (minimum) concessional tax rebate, to arrive at the 1976-77 tax scale, was + 13.0 per cent.

The Rationale For Tax Indexation

The aim of tax indexation is to ensure that income tax, as a proportion of income, remains unchanged from one year to the next for a person whose income keeps pace exactly with price rises as measured by the Consumer Price Index (adjusted to offset the effect of changes in indirect taxes). It therefore ensures that tax remains constant in *real* terms for a person whose income remains constant in *real* terms (provided the Government does not separately increase or decrease the tax rates). Indexation should, therefore, ensure that the level of income taxation does not continue to constantly rise due to inflation, but that, to change it, legislation is required. (This has not in fact occurred fully under the system adopted in Australia as the indexation provisions have not applied to the maximum limits applying to items of concessional (rebatable) expenditure. Also, with the introduction of indexation for the 1976-77 income year, tax rebates, which had previously applied in respect of dependent children, were abolished. This was offset by significant increases in family allowance payments (see Chapter 8) payable in respect of dependent children but the amounts involved have *not* been subject to indexation adjustments to take account of inflation. Furthermore, the Government legislated to apply less than full indexation for the years 1978-79 to 1981-82.)

History of Tax Indexation

Following the introduction of personal tax indexation for the 1976-77 income year, full indexation (subject to discounting for changes in indirect taxes) was also applied in respect of the 1977-78 income year. However, for the years 1978-79 to 1980-81, the Federal Government legislated to apply less than full tax indexation.

Changes to the Scheme from 1977-78

The 1977-78 Federal Budget (introduced on 16 August 1977) included provisions for significant changes to the personal income tax system. A new tax rate scale was introduced which was used as the basis for calculating PAYE deductions from 1 February 1978. The general concessional rebate of \$676 was abolished; the only concessional expenditure to attract a rebate was that in *excess* of \$1 590 at a reduced rate of 32 cents in the dollar. The actual effective rates of tax for 1977-78 were a composite of those for this new scheme and the pre-Budget scheme based on indexation of the 1976-77 tax scale (details are set out in the 1978 *Year Book*.) The maximum amounts that could be included as concessional expenditure for specified types of expenditure, dependant rebates and the sole parent rebate remained unchanged. The marginal ('standard') tax rates applying from 1 February 1978 were: nil (up to an income of \$3 750); 32 cents in the dollar (on each dollar in the range \$3 751 to \$16 000); 46 cents in the dollar (\$16 001 to \$32 000); and 60 cents in the dollar (\$32 001 and over).

For 1978-79 only half indexation was applied to the tax brackets (see the 1980 *Year Book* for further details). In addition, a tax surcharge was applied—all tax rates (apart from the zero rate) were increased by 1.5 cents in the dollar (i.e. an increase of 4.7 per cent in the standard rate—from 32 cents to 33.5 cents in the dollar).

No tax indexation adjustment was applied for the 1979-80 income year and in addition, a surcharge of 1.07 cents in the dollar was applied to the normal rates (32, 46 and 60 cents in the dollar). (This represented a 3.3 per cent increase in the standard rate—33.07 cents in the dollar instead of 32 cents.) Details are included in the 1980 *Year Book*.

For 1980-81 half indexation was applied to the tax brackets (see the 1981 *Year Book* for further details) resulting in them being indexed upwards by 3.8 per cent.

Half indexation of 3.8 per cent was again applied in the 1981-82 tax brackets (see the 1982 *Year Book* for further details). In addition from 1 November 1981, new arrangements applied for zone rebates. While the basic rebates for Zone A and Zone B remain unchanged, the part of the rebate relating to children increased from 25 per cent to 50 per cent of relevant dependant rebates for people in Zone A and from four per cent to 20 per cent for those in Zone B.

No tax indexation adjustment applies for the 1982-83 income year but the lower tax brackets and some dependants rebates were adjusted. In addition, a difference in the method of taxing non-residents of Australia was introduced.

1982-83 Personal Income Tax Rates

The following table shows tax scales applying for the 1982-83 income year in respect of a resident of Australia.

Income Tax Rates 1982-83 (a)			
Taxable income (b) bracket	Marginal tax rate (c) Cents per \$	Gross Tax	
		On income in bracket specified in first column \$	Cumulative (i.e. on higher figure in first column) (d) \$
1- 4 462	—	—	—
4 463-17 894	30.67	4 119.59	4 119.59
17 895-19 500	35.33	567.40	4 686.99
19 501-35 788	46.00	7 492.48	12 179.47
Over 35 788	60.00	—	—

(a) As announced in August 1982.

(b) Gross income less expenses incurred in earning that income; subscriptions to trade, business or professional association or union and gifts to approved funds or institutions.

(c) Marginal rate payable in respect of each dollar in the range specified.

(d) Subject to reduction (if applicable) by:

- (i) 30.67 per cent of total concessional (rebatable) expenditure in excess of \$1 590;
- (ii) rebates in respect of dependants, housekeeper or sole parent;
- (iii) Zone A rebate of \$216 plus 50 per cent of rebates for dependants, including notional rebates for dependent children and students, or Zone B rebate of \$36 plus 20 per cent of rebates for dependants, including notional rebates for dependent children and students;
- (iv) a rebate of 27 cents for each dollar of paid-up capital subscribed to certain petroleum exploration and mining companies;
- (v) a rebate of 30.67 per cent on up to \$1 000 of dividends from resident public or private companies (not co-operatives) included in the taxable income;
- (vi) a rebate of 30.67 per cent on interest paid in excess of 10 per cent per annum in respect of the first \$60 000 of any loan in connection with the purchase or construction of the principal residence in Australia;
- (vii) a rebate to social security and repatriation pensioners of \$167 reduced by 12½ cents for each \$1 of taxable income over \$5 007.

Non-Resident Tax Rates

Except for those in receipt of taxable social security and repatriation benefits, non-residents will not receive the benefit of the zero-rated bracket in the above table. Nor will they benefit from the rebates mentioned at (d)(iii), (v) or (vi) above.

Dependant and Sole Parent Rebates

The dependant and sole parent rebates for 1982-83 are:

Dependant and Sole Parent Rebate 1982-83

<i>Dependant</i>	<i>Maximum Tax Rebate (a)</i>
	\$
Dependent spouse or daughter-housekeeper (b)	963
Dependent spouse or daughter-housekeeper	830
Housekeeper (c)(b)	963
Housekeeper (c)	830
Parent or parent-in-law	749
Invalid relative	376
Sole parent (d)	713

(a) Reduced proportionately if dependant was only dependent upon the taxpayer for part of the year. Each rebate, except the sole parent and housekeeper rebate, is reduced by one dollar for every four dollars by which the dependant's separate net income exceeds \$282.

(b) Allowable where there is a dependent child under 16 or a student child under 25 in respect of whom rebates would have been allowable but for their replacement by family allowances.

(c) Allowable, subject to certain other conditions, only if no daughter-housekeeper or sole parent rebate claimed.

(d) Allowable to a sole parent if neither a daughter-housekeeper nor a housekeeper rebate is claimed.

Concessional Rebates

The maximum concessional expenditure limits have remained unchanged since 1975-76 with the exception of health insurance contributions (see note (a) to the next table). For the income years 1975-76 and 1976-77, a concessional rebate of 40 per cent of all allowable concessional expenditure applied, including minimum concessional tax rebates of \$540 and \$610 for 1975-76 and 1976-77, respectively. However, for the years 1977-78, 1978-79, 1979-80, 1980-82 and 1982-83 the concessional rebate was reduced to 32 per cent, 33½ per cent, 33.07 per cent, 32 per cent and 30.67 per cent respectively, of concessional expenditure in excess of \$1 590. The maximum amounts of concessional (rebatable) expenditure in respect of qualifying items are shown in the following table:

Personal Income Tax: Concessional Expenditure Limits, 1975-76 to 1982-83

<i>Particulars</i>	<i>Maximum Rebatable Expenditure</i>
	\$
Rates and land taxes on principal residence	300
Health insurance (a)	contributions to basic hospital and/or medical benefits
Direct medical, dental, optical, etc expenses (b)(c) ..	no limit
Funeral expenses (b)	100 (per dependant)
Life insurance premiums plus superannuation contribution (d)	1 200
Education expenses (e)	250 (per student)
Self-education expenses	250
Adoption expenses	no limit
Calls paid on shares in afforestation companies	1/3 amount paid

(a) For the income year 1975-76 there was no limit on subscriptions paid to registered medical and hospital benefits funds for the personal benefit of a taxpayer, his spouse or children. However, for 1976-77 such subscriptions allowable as a rebatable concessional expenditure were limited to:

- (i) amounts paid by a taxpayer between 1 July 1976 and 1 October 1976 for cover up to 1 October 1976; and

continued next page

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- (ii) amounts paid prior to 1 October 1976 giving entitlement beyond that date in respect of cover in excess of 'standard' medical and hospital cover.

Health insurance contributions paid after 1 October 1976 are not allowable concessional expenditure subject to rebate. From 1 July 1981 an income tax rebate of 30.67 per cent is allowable for basic health insurance contributions, but this rebate does not form part of the concessional rebate calculation.

- (b) In respect of a resident taxpayer and/or his 'dependants' who are residents.
- (c) Net of refunds.
- (d) For benefit of the taxpayer, or the spouse or child of the taxpayer.
- (e) In respect of the taxpayer's child or other dependant under 25 for whom the taxpayer is entitled to a rebate or notional rebate.

ECONOMIC CENSUSES AND SURVEYS

Introduction

Integrated economic censuses of Australian industry sectors commenced in 1968-69. The industry sectors covered initially were mining, manufacturing, electricity and gas, retail trade and wholesale trade. Other sectors subsequently included were agriculture and construction. The frequency of collection and the method of coverage vary from annual censuses for manufacturing and mining, quinquennial censuses for retail, triennial surveys for agriculture, quinquennial surveys for construction, to wholesale trade where 13 years elapsed before the next collection was undertaken. In the 1972 *Year Book*, Appendix A gave a detailed description of the first Australian Integrated Economic Censuses, conducted by the Australian Bureau of Statistics for the 1968-69 financial year. The various industry sectors currently covered by integrated economic censuses and the Agricultural Finance Survey are each featured in this book; references are: (i) *Agriculture*, Chapter 12; (ii) *Mining*, Chapter 13; (iii) *Manufacturing*, Chapter 14; (iv) *Electricity and Gas*, Chapter 15; and (v) *Retail Trade*, Chapter 16.

In this section are set out the definitions of terms and concepts which apply to the integrated economic censuses. Also, the results of those industry sectors covered by censuses in recent years, together with survey results for the agricultural sector, are brought together to allow inter-sector comparisons to be made. Comparison tables showing the results of the five 1968-69 censuses may be found in Chapter 18 of the 1977 *Year Book*.

Concepts and Definitions

For the 1968-69 and subsequent economic censuses uniform definitions and concepts have been used. This allows inter-sector comparisons (see later section) and increases the usefulness of the data derived from censuses for economic analysis and market research. Definitions and concepts used in these censuses are summarised below.

Establishment: Generally the establishment is the whole of each physical location operated by one enterprise, given that the main activity of the establishment is within scope of the census. Usually only one return is submitted for each establishment *classified to the industry of its main activity*. The principal exception to the 'one return one establishment' rule is where a secondary activity at a location creates gross receipts in excess of a limit (currently \$3.2m). In such cases the secondary activity may have to be reported on a second return appropriate to its industry or its sector. Details for *administrative offices and ancillary units* (such as head offices, storage depots, garages, laboratories, etc.) which serve or administer establishments within the same enterprise but which are located away from them are treated as follows: (i) if only one establishment is served or administered then details are included in the establishment return; or (ii) if more than one establishment is served or administered, details are included on the enterprise return. *Manufacturers' sales branches* located away from the parent manufacturing establishment are treated as ancillary units provided they do not distribute goods to customers from

their own holdings of stocks. If the unit does distribute from stocks in this manner then it is treated as an establishment and included in the wholesale sector.

Electricity and Gas Industries—the Exception: The single operating location is not suitable as a basis for enterprises engaged in producing or distributing electricity or gas. Therefore for electricity and gas industries, a special treatment was devised—the establishment unit for these industries consists of all locations operated by the enterprise in the one state.

Enterprise: This is broadly the operating legal entity and is the key unit for the collection of information. Where a number of legal entities operate as a group, owned or controlled by a single company, the enterprise is not the group as a whole, but each individual operating legal entity in the group.

Enterprise Group: Comprises a group of operating legal entities owned or controlled by a single company.

Value Added: Common to all sectors covered by integrated economic censuses is the following definition: value added *equals* turnover *plus* increase in stocks *minus* purchases, transfers in and selected expenses. The value added measure can then be aggregated for all establishments and sectors covered by the censuses *without duplication*. In broad terms, value added is the surplus from which establishments pay wages and salaries, interest, depreciation, rents and overheads. The remainder is available for appropriation as profits (after provision for income tax).

Turnover: The definition of turnover is as follows: (a) In manufacturing and mining censuses: (i) sales of goods produced by the establishment; (ii) sales of goods not produced by the establishment; (iii) transfers out of goods to other establishments of the same enterprise; (iv) bounties and subsidies on production; (v) all other operating income but excluding interest other than hire purchase interest, dividends and sales of fixed tangible assets; and (vi) capital work done for own use or for rental or lease and from 1978-79, rent, leasing and hiring expenses. (b) In retail and wholesale trade censuses: (i) sales of goods (owned by the enterprise); (ii) transfers out of goods to other establishments of the same enterprise (applies only to wholesale); (iii) selling and purchasing commissions received (applies only to wholesale); (iv) all other operating income but excluding items specified in (a) (v) above; and (v) goods withdrawn from stock for own use (as fixed tangible assets, or for rental or lease).

Purchases and Selected Expenses: Are defined as follows: (a) In manufacturing and mining censuses: (i) the value of purchases of materials, fuels, electricity and gas, and wrapping and packaging materials is supplemented by the value of transfers in from other establishments of the enterprise; (ii) purchases of goods for resale are included as well as purchases for own use in production; and (iii) selected expenses comprise repair and maintenance expenses, charges for sub-contract and commission work, outward freight and cartage, motor vehicle running expenses and sales commission payments. (b) In retail and wholesale trade censuses: (i) the value of purchases of goods for resale is widened to include purchases for both wholesale and retail trade, no matter whether the establishment is primarily a retailer or a wholesaler; (ii) the value of purchases also includes purchases of materials for manufacturing to cover cases where the retail or wholesale establishment has this secondary activity; and (iii) selected expenses comprise those specified in (a) (iii) above *plus* purchases of wrapping and packaging materials, and electricity and gas (see item (a) (i) in preceding manufacturing and mining group for the reason for this addition).

Stocks: Are the total held by the establishment and may therefore include some stocks held for secondary activities, e.g. a manufacturing establishment may have, in its stocks figure, merchanted goods held or a retail establishment may include in its return, stocks held for wholesaling and manufacturing.

Transfer Values: Transfers, both in and out, are confined to transfers of goods; the term is further narrowed to mean transfers between establishments of the same enterprise. Provision exists for recording transfers in all census sectors except retail trade and here

the instruction requires purchases to be reported inclusive of transfers in, but net of transfers out. Thus, transfers are taken into account in arriving at value added since transfers out, as just defined, are a part of turnover and transfers in are a part of purchases and selected expenses.

Employment, Salaries and Wages: In accordance with the new concept of treating the establishment as a whole, all employees are entered, including those working in administrative offices and ancillary units which serve only the one associated establishment.

Fixed Capital Expenditure: The general basis for collection is: purchases of new and second-hand assets *less* sales of second-hand assets. (For establishments of multi-establishment enterprises, transfers from other establishments of the enterprise are treated as purchases, and transfers to such establishments are treated as sales.) The dissection of fixed capital expenditure comprises expenditure on: (i) motor vehicles; (ii) land and buildings; and (iii) plant and machinery. A further distinction is made between new assets and second-hand assets.

Industrial Classification

The Australian Standard Industrial Classification (ASIC) (Preliminary 1969 Edition) was adopted for use in the 1968-69 and subsequent economic censuses. The 1978 Edition of ASIC was used from economic censuses in 1977-78. ASIC defines the industries for which statistics are collected in the censuses and allows the scope of the individual censuses to be marked out without gaps or duplications between them. It also identifies the statistical units (establishments, enterprises, etc.) and lays down standard rules for identifying and coding them to industries of the classification. A detailed description of ASIC may be found in the Bureau publication *ASIC, Australian Standard Industrial Classification, 1978 Edition Vol. 1: The Classification* (1201.0).

Agricultural Sector Financial Statistics

From 1968-69, the Bureau has progressively developed agricultural industry finance surveys to obtain: firstly, details of farm expenditure; and, more recently, a wide range of financial data on a compatible basis to that available for industry sectors covered by the integrated economic censuses. The coverage of the 1974-75 and subsequent Agricultural Finance Surveys has consisted of a randomly selected sample of agricultural enterprises (classified to ASIC Subdivision 01). Results of these surveys have been used to calculate estimates covering all agricultural enterprises. A complete agricultural sector economic census of all agricultural enterprises has not been conducted, nor is one proposed, because of the high cost involved.

The concepts and definitions used are basically the same as those outlined above for the integrated economic censuses. Additional notes are set out below:

Value Added: When determining the 'increase in stocks' only livestock is taken into account because of its relative significance and the difficulties associated with including other farm stocks.

Turnover: Turnover of agricultural enterprises includes proceeds received during the year (which do not necessarily relate to the production of that year) from the sale of crops, livestock and livestock products, and other miscellaneous revenue. Miscellaneous revenue includes both sundry agricultural proceeds (such as proceeds from insurance recoveries, agistment, livestock service, artificial insemination, government relief payments, agricultural services such as contract shearing, harvesting, etc.) and also receipts from any non-agricultural activity of the enterprise.

Purchases and Selected Expenses: Include cash payments made during the year for goods and services including marketing expenses; purchases of livestock, feed, fodder, fertiliser, chemicals and veterinary supplies and services; payments for electricity, fuel, water and drainage; payments to contractors; repairs and maintenance to motor vehicles,

machinery, equipment, buildings, structures and fences; motor vehicle registration and insurance; insurance of plant; payments for agistment; etc.

Construction Sector Statistics

A sample survey of private construction establishments was conducted for the first time in 1978-79. The scope of the survey included all private sector establishments and ancillary units predominantly engaged in construction activities, i.e. those establishments classified to the industries in Division E of the ASIC.

At the same time, details were collected from all public sector establishments classified to construction activity but, because of different definitions, the public sector construction activity data cannot be validly aggregated with private sector construction establishment data to give 'total construction'. Construction sector data included in the accompanying tables are, accordingly, in respect of the private sector only.

Comparisons Between Industry Sectors

Principal items from economic censuses conducted in recent years are shown below:

Selected Industry Sectors, Tasmania					
ASIC classification of establishments and year		Number of establishments at 30 June	Persons employed at 30 June	Wages and salaries	Value added
			no.	\$'000	\$'000
Agriculture (a)—	1976-77	5 768	n.a.	n.a.	77 900
	1977-78	5 793	n.a.	n.a.	87 200
	1980-81	5 685	n.a.	n.a.	115 100
Construction (b)—	1978-79	1 446	7 601	55 703	103 036
Mining (c)—	1976-77	63	4 133	51 538	118 619
	1977-78 (d)	63	4 241	53 870	143 877
	1978-79	66	4 356	63 122	183 963
	1979-80	69	4 527	75 878	247 396
	1980-81	70	4 672	84 699	192 703
Manufacturing—	1976-77	617	28 308	246 014	533 288
	1977-78 (d)	599	27 037	258 341	497 979
	1978-79	552	26 329	266 099	549 372
	1979-80	543	26 429	298 196	653 770
	1980-81	558	26 488	346 551	713 445
Retail (e)—	1979-80	3 299	19 973	121 341	267 869

(a) Agricultural financial data are based on surveys of agricultural enterprises. The count of units involved is consequently the number of enterprises.

(b) Private sector only. These figures are based on sample surveys and are subject to sampling errors.

(c) Census results exclude 'small' tin miners whose sales were less than \$20 000.

(d) From 1977-78 the census results are based on the 1978 edition of ASIC.

(e) Excludes all bread and milk vendors and single establishment enterprises with turnover of less than \$50 000.

As already noted, value added is a measure that can be aggregated and directly compared for all establishments and industry sectors for which it has been determined, *without duplication*. The following table compares the industry sectors of agriculture, mining and manufacturing on the basis of value added for recent years:

Selected Industry Sectors, Tasmania: Value Added

Industry sector	1978-79		1979-80		1980-81	
	Value added	Per head of mean population	Value added	Per head of mean population	Value added	Per head of mean population
	\$m	\$	\$m	\$	\$m	\$
Agriculture (a)	n.a.	n.a.	n.a.	n.a.	115.1	271
Mining	184.0	443	247.4	588	192.7	453
Manufacturing	549.4	1 322	653.8	1 555	713.4	1 678
Construction (a)	103.0	247	n.a.	n.a.	n.a.	n.a.
Retail	n.a.	n.a.	267.9	637	n.a.	n.a.

(a) These figures are based on sample surveys and are subject to sampling errors. 'Standard errors' indicating the reliability of the estimates are included in the Canberra Office publications *Agricultural Sector, Part IV, Financial Statistics* (Cat. No 7507.0) and *Private Sector Construction Establishments* (Cat. No. 8720.0).

Further References

ABS Publications Produced by the Tasmanian Office

- Retail Establishments and Selected Service Establishments, Details of Operations by Industry Class, Tasmania (8622.6), irregular, 1979-80 released February 1982.
- Retail Establishments and Selected Service Establishments, Industry and Commodity Details for Statistical Retail Areas, Tasmania (8623.6), irregular, 1979-80 released March 1982.
- Retail Establishments and Selected Service Establishments, Hotels and Accommodation, Tasmania (8624.6), irregular, 1979-80, released March 1982.
- Retail Establishments and Selected Service Establishments, Commodity Sales and Service Takings, Tasmania (8625.6), irregular, 1979-80, released July 1982.
- Retail Establishments and Selected Service Establishments. Industry and Commodity Details by Size of Establishments, Tasmania (8626.6), irregular, 1979-80 released August 1982.

ABS Publications Produced by the Canberra Office

- ASIC, Australian Standard Industrial Classification, (irregular, 1978 edition released June 1978)—
Vol 1: The Classification (1201.0)
Vol. 2: Alphabetic Index of Primary Activities (1202.0)
- Australian National Accounts National Income and Expenditure (Advance Release) (5201.0), annual.
- Australian National Accounts (Preliminary Statement No. 2)—Household Income by States (5202.0), annual.
- Australian National Accounts (Preliminary Statement No. 3)—Gross Domestic Product at Factor Cost by Industry (5203.0), annual.
- Australian National Accounts—National Income and Expenditure (5204.0), annual.
- Quarterly Estimates of National Income and Expenditure (5206.0), quarterly.
- Australian National Accounts—Gross Product by Industry at Current and Constant Prices (5211.0), annual.
- Australian National Accounts—Concepts, Sources and Methods (5216.0).
- Australian National Accounts—Outline of Principal Sources and Methods (5212.0), irregular.
- National Income and Expenditure (a Federal Budget paper) (5213.0), annual.

Other Publications

- AUSTRALIA, PARLIAMENT. *Commissioner of Taxation, Reports* (annual). (Parl. Paper, Canberra).
- TREASURER (Federal). *Budget Papers No. 1 and No. 11* (annual). (AGPS, Canberra).
- Inquiry into the Structure of Industry and the Employment Situation in Tasmania*, Report by Sir Bede Callaghan CBE (AGPS, Canberra, 1977). (Commissioned by the Federal Government in December, 1976).

Appendix A

STATISTICAL SUMMARY

In the following pages, an historical summary of the more important statistics available that relate to Tasmania is shown. Only brief footnotes have been included and readers should refer to the relevant chapter of the *Year Book* for more detailed definitions. Naturally, the range of statistics for early years is very limited. Also, it should be borne in mind that perfect comparability over long periods of time is difficult to attain due to changes in definitions, scope of statistical collections, etc. While major breaks in series are shown, minor changes to series are not indicated and the statistics should be interpreted with this in mind.

Generally, the first year shown on each page is the earliest for which any series on that page is available. Due to space constraints, earlier details for some series are given only for either every five or ten years. Items included have been arranged in chapter order.

(Chapter 4)

Aggregate Net Loan Expenditure and Public Debt, Tasmania

Year	Aggregate net loan expenditure to end of year							Public debt at end of year (a) (at mint par of exchange)	Annual interest liability at current rates of exchange	
	Purpose						Total		Amount	Average rate
	Railways and transport	Hydro-electric works	Roads, bridges, harbours	School buildings and University	Housing advances and construction	Other				
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	%
1890	6 508	—	3 354	238	—	2 282	12 382	12 866		
1900	7 820	—	5 352	334	—	2 986	16 492	17 022		
1910-11	8 866	—	7 258	488	—	5 034	21 646	22 156	n.a.	n.a.
1920-21	11 702	3 994	10 390	848	206	12 302	39 442	37 552		
1930-31	13 866	7 692	13 540	1 312	412	16 568	53 390	46 778		
1940-41	14 520	13 018	14 412	1 986	902	19 392	64 230	56 332		
1950-51	20 958	40 448	16 214	4 694	9 946	33 468	125 728	114 066	n.a.	3.1977
1960-61	31 126	181 578	35 076	27 266	29 536	87 422	392 004	354 558	n.a.	4.3845
1961-62	31 418	195 206	39 144	30 450	29 190	96 684	422 092	379 252	17 064	4.3948
1962-63	31 296	208 706	42 942	34 048	28 990	106 621	452 603	404 594	19 523	4.4585
1963-64	34 410	222 905	47 704	38 342	28 577	113 570	485 508	432 311	19 790	4.4634
1964-65	34 984	239 419	51 171	42 395	28 244	122 653	518 866	462 302	21 706	4.5890
1965-66	35 789	255 919	55 593	46 832	27 970	133 325	555 428	491 658	23 987	4.7693
1966-67	36 088	273 919	57 486	50 858	27 692	146 021	592 064	524 918	25 940	4.8432
1967-68	36 910	293 919	58 774	54 964	27 217	162 408	634 192	560 893	27 777	4.8879
1968-69	37 170	314 644	59 563	59 387	27 230	176 586	674 580	599 736	30 040	4.9517
1969-70	40 503	337 769	60 686	64 853	26 469	189 370	719 650	637 407	32 939	5.1163
1970-71	42 169	362 269	61 706	70 544	26 104	204 250	767 042	665 397	36 203	5.3928
1971-72	47 199	388 269	62 636	78 952	31 497	224 757	833 310	705 271	39 202	5.5220
1972-73	58 643	410 629	63 176	90 753	36 837	240 516	900 554	749 583	41 620	5.5300
1973-74	67 609	433 629	63 886	102 567	36 228	261 248	965 167	787 618	45 922	5.8300
1974-75	81 033	456 854	64 504	114 219	35 771	288 832	1 041 213	833 862	49 005	6.4100
1975-76	(b) 15 186	486 554	65 559	132 917	37 475	316 692	1 054 383	753 797	53 748	7.1300
1976-77	13 714	517 554	71 407	156 939	40 694	370 933	1 164 561	811 012	60 437	7.4500
1977-78	14 730	540 554	75 526	178 496	42 558	417 616	1 269 481	870 097	68 233	7.8400
1978-79	15 466	557 204	80 526	197 373	48 754	469 324	1 368 648	922 559	73 604	7.9783
1979-80	16 033	569 879	85 338	215 364	58 922	515 499	1 461 035	969 948	80 205	8.2700
1980-81	16 136	581 179	89 618	230 191	67 759	568 297	1 553 180	1 020 804	91 494	8.9600
1981-82	16 239	604 979	93 156	236 320	78 113	609 374	1 638 181	1 071 606	105 333	9.8300

(a) Expenditure under Commonwealth and State Housing Agreements is excluded from Public Debt.

(b) The Tasmanian Government Railways were taken over by the Australian National Railways Commission from 1 July 1975.

(Chapter 4)

Consolidated Revenue Fund: Revenue and Expenditure, Tasmania (a)
(S'000)

Year	Revenue	Expenditure	Budget result	Aggregate net deficit at end of year
1891	1 889	1 827	+ 63	497
1901	1 652	1 741	- 89	487
1910-11	1 940	2 034	- 94	490
1911-12	2 169	2 129	+ 40	450
1912-13 (b)	2 413	2 192	+ 221	229
1913-14	2 476	2 470	+ 6	223
1914-15	2 488	2 768	- 280	503
1915-16	2 753	2 681	+ 72	432
1916-17	2 739	2 826	- 87	519
1917-18	3 006	2 919	+ 87	432
1918-19	3 164	3 289	- 125	557
1919-20	3 630	3 657	- 27	584
1929-30	5 379	5 430	- 51	1 451
1930-31	5 219	5 709	- 490	1 942
1931-32	4 771	5 314	- 543	2 485
1932-33	5 044	5 155	- 110	2 596
1933-34	5 396	5 492	- 95	2 691
1934-35	5 744	5 983	- 238	2 930
1935-36	6 235	6 495	- 259	3 189
1936-37	6 977	6 887	+ 90	3 099
1937-38	7 280	7 266	+ 14	3 086
1938-39	7 230	7 281	- 52	3 138
1939-40	6 111	6 106	+ 5	3 133
1940-41	5 843	6 206	- 363	3 496
1941-42	6 717	6 714	+ 3	3 493
1942-43	6 581	6 800	- 219	3 712
1943-44	6 997	6 937	+ 60	3 651
1944-45	7 313	7 351	- 38	3 690
1945-46	7 867	8 068	- 201	3 891
1946-47	9 014	9 147	- 132	4 023
1947-48	10 156	10 204	- 48	4 071
1948-49	11 288	11 691	- 402	4 473
1949-50	13 882	14 165	- 283	4 756
1950-51	15 831	16 324	- 493	5 249
1951-52	20 386	21 490	- 1 104	6 353
1952-53	22 922	23 526	- 604	6 957
1953-54	26 502	26 840	- 338	7 294
1954-55	29 877	30 614	- 737	8 032
1955-56	34 389	35 792	- 1 403	9 434
1956-57	37 889	39 543	- 1 655	11 089
1957-58	43 210	43 228	- 18	11 107
1958-59	45 520	45 518	+ 2	11 105
1959-60	50 542	50 657	- 114	11 219
1960-61	54 054	54 167	- 113	11 332
1961-62	61 191	61 352	- 161	11 493
1962-63	64 018	64 019	- 1	11 493
1963-64	69 167	69 021	+ 147	11 346
1964-65	76 012	76 465	- 452	11 799
1965-66	84 453	85 585	- 1 132	12 931
1966-67	91 486	93 248	- 1 762	14 693
1967-68	100 463	102 413	- 1 951	16 644
1968-69	109 526	111 540	- 2 015	18 659
1969-70	120 619	121 004	- 385	19 044
1970-71	135 829	138 207	- 2 378	21 422
1971-72	156 432	160 237	- 3 805	25 226
1972-73	181 866	185 998	- 4 132	29 358
1973-74	206 947	210 097	- 3 150	32 508
1974-75	268 522	282 065	- 13 544	46 052
1975-76	322 091	317 947	+ 4 144	41 908
1976-77	396 617	395 033	+ 1 583	41 908
1977-78	444 263	450 706	- 6 443	48 351
1978-79	495 822	492 961	+ 2 861	45 490
1979-80	560 192	563 917	- 3 725	49 214
1980-81	620 307	627 441	- 7 133	56 348

(a) From 1947-48 until 1971-72, the items 'Revenue' and 'Budget result' are shown adjusted according to the Special Grant Adjustment.
 (b) System of annual Commonwealth Special Grants introduced.

(Chapter 4)

Gross and Net Loan Expenditure, Tasmania

Year	Gross expenditure	Net expenditure	Revenue deficit funded (a)	Net loan expenditure per head of population	Year	Gross expenditure	Net expenditure	Revenue deficit funded (a)	Net loan expenditure per head of population
	\$'000	\$'000	\$'000	\$		\$'000	\$'000	\$'000	\$
1900 to 1904-05 (b)	543	473	—	2.68	1949-50	11 742	9 884	48	36.02
1905-06 to 1909-10 (b)	571	519	—	2.78	1950-51	30 802	27 465	402	96.86
1910-11 to 1914-15 (b)	1 147	1 039	—	5.40	1951-52	34 047	30 047	283	103.28
1915-16 to 1919-20 (b)	2 004	1 549	—	7.84	1952-53	40 152	26 137	493	86.38
1920-21	6 181	5 435	—	25.68	1953-54	31 816	27 544	1 104	89.00
1921-22	5 377	4 292	—	19.98	1954-55	35 310	29 378	604	93.96
1922-23	3 422	2 307	699	10.68	1955-56	35 213	27 048	338	84.98
1923-24	2 752	1 492	—	6.88	1956-57	23 544	22 039	737	67.88
1924-25	1 907	496	—	2.30	1957-58	23 390	21 666	1 403	33.26
1925-26	2 226	1 138	—	5.30	1958-59	27 610	25 112	1 655	74.16
1926-27	2 290	659	—	3.08	1959-60	29 130	26 443	18	76.84
1927-28	2 068	809	—	3.78	1960-61	33 865	30 611	—	87.38
1928-29	2 059	698	—	3.22	1961-62	32 521	30 088	112	84.60
1929-30	2 932	294	—	1.34	1962-63	33 332	30 511	113	84.58
1930-31	(c) 2 921	(c) 1 651	—	7.40	1963-64	35 354	32 905	161	90.32
1931-32	1 319	193	—	0.86	1964-65	35 816	33 352	—	90.65
1932-33	887	— 147	—	— 0.64	1965-66	39 411	36 573	—	98.46
1933-34	1 050	238	—	1.04	1966-67	40 161	36 636	306	98.15
1934-35	1 572	723	—	3.16	1967-68	46 054	42 128	1 132	111.62
1935-36	3 717	2 000	678	8.66	1968-69	44 458	40 164	1 762	105.02
1936-37	3 996	1 684	—	7.00	1969-70	49 411	45 069	—	116.67
1937-38	3 785	1 701	—	7.32	1970-71	52 079	47 393	—	121.75
1938-39	3 699	1 479	—	6.22	1971-72	73 037	66 268	4 350	169.22
1939-40	3 628	1 806	—	7.52	1972-73	76 813	67 243	2 378	170.67
1940-41	4 231	2 268	363	9.40	1973-74	73 947	64 603	3 805	162.60
1941-42	3 581	1 430	—	5.96	1974-75	90 060	76 056	7 282	189.15
1942-43	3 001	1 002	—	4.14	1975-76	98 818	81 369	—	200.32
1943-44	5 218	3 350	219	13.70	1976-77	126 223	110 178	9 400	269.31
1944-45	3 587	1 806	910	7.32	1977-78	122 544	99 167	1 250	238.67
1945-46	3 540	1 590	—	6.36	1978-79	121 979	92 387	—	219.76
1946-47	5 899	2 725	239	10.70	1979-80	—	—	—	—
1947-48	8 361	6 528	132	24.98	1980-81	116 005	91 793	6 057	214.82
1948-49	11 051	9 013	488	33.82	1981-82	106 831	85 001	7 133	198.22

(a) These amounts are included in both Gross and Net Loan Expenditure. The figures shown are a complete record of funded deficits since 1900.

(b) Annual average for the five-yearly period shown.

(c) Includes \$1 233 000, the amount re-appropriated to provide for certain deferred revenue charges.

(Chapter 5)

Local Government Finance, Tasmania

Year	Value of ratable property			Revenue Fund—ordinary services and business undertakings		Loan Fund			
	Land value	Total capital value	Assessed annual value	Revenue	Expenditure	Loan raisings	Expenditure	Total debt	Annual interest liability
	(a) (b) (c)	(a) (b)		(d)	(d)			(b)	
	\$ million	\$ million	\$ million	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
1929-30	46.17	101.40	5.51	1 954	1 956	227	212	6 502	n.a.
1939-40	46.16	109.82	6.10	2 174	2 192	212	230	6 712	300
1949-50	50.73	134.70	9.02	3 694	3 696	1 400	1 423	7 219	267
1950-51	55.86	155.35	10.24	4 283	4 327	1 860	1 594	8 534	304
1951-52	63.43	187.66	11.43	5 357	5 351	2 554	2 558	10 453	372
1952-53	69.93	224.91	12.87	6 024	6 048	2 184	2 166	11 900	444
1953-54	74.31	252.69	13.84	6 641	6 506	2 418	1 758	13 600	533
1954-55	83.58	296.37	15.88	6 972	7 053	2 796	2 408	15 603	639
1955-56	93.84	345.27	15.56	6 386	6 596	2 367	2 730	(e) 15 389	654
1956-57	130.13	495.31	25.42	7 417	7 261	2 310	2 682	16 967	761
1957-58	140.55	553.90	28.23	7 998	7 904	4 024	3 237	20 192	944
1958-59	164.66	653.48	33.41	8 837	8 837	3 685	3 541	22 979	1 111
1959-60	179.03	739.35	37.31	9 781	9 762	5 232	4 671	27 144	1 337

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Year	Value of ratable property			Revenue Fund— ordinary services and business undertakings		Loan Fund			
	Land value (a) (b) (c)	Total capital value (a) (b)	Assessed annual value	Revenue (d)	Expendi- ture (d)	Loan raisings	Expendi- ture	Total debt (b)	Annual interest liability
	\$ million	\$ million	\$ million	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
1960-61	185.93	808.21	40.04	10 867	10 924	5 277	5 259	31 285	1 571
1961-62	193.52	870.08	42.89	12 097	11 779	6 159	5 658	36 181	(f) 1 515
1962-63	216.01	942.88	48.62	13 765	13 256	5 268	7 212	39 842	1 897
1963-64	271.83	1 075.09	57.51	14 792	14 654	5 823	7 431	44 063	2 061
1964-65	290.52	1 140.40	61.27	16 250	16 176	6 237	6 354	48 368	2 209
1965-66	316.91	1 202.22	68.54	17 395	17 085	6 512	8 342	52 844	2 442
1966-67	328.50	1 271.87	72.47	19 594	19 068	6 981	8 091	57 611	2 893
1967-68	350.81	1 350.44	86.35	21 235	20 858	8 183	9 364	62 821	3 186
1968-69	374.49	1 452.38	95.57	23 478	22 790	7 633	8 616	66 922	3 496
1969-70	411.72	1 571.96	102.98	25 914	24 816	6 793	7 972	71 854	3 858
1970-71	441.88	1 691.37	107.78	28 236	27 195	6 964	7 494	75 752	4 149
1971-72	454.47	1 768.07	114.86	31 505	30 985	7 326	8 504	79 907	4 534
1972-73	483.44	1 874.17	124.61	37 000	34 552	8 151	9 668	84 781	4 865
1973-74	511.39	1 995.91	147.41	40 376	38 381	8 574	8 803	89 766	5 298
1974-75	619.19	2 317.03	165.47	52 313	51 830	12 260	12 677	97 892	5 951
1975-76	696.26	2 570.15	185.36	68 345	65 118	15 870	19 368	109 655	7 071
1976-77	763.67	2 902.51	218.86	76 376	69 204	17 775	20 579	122 950	8 655
1977-78	1 155.61	3 531.99	260.11	82 607	77 476	18 595	23 135	136 366	10 283
1978-79	1 401.17	4 241.72	344.62	92 130	86 286	19 872	24 120	149 934	12 017
1979-80	397.69	73 561	9 342	59 634	24 482	33 375	12 015	28 150	12 015
1980-81	435.46	78 435	7 822	64 575	24 183	38 021	13 879	32 355	13 879

(a) State Government valuation.

(b) At 30 June.

(c) Prior to 1977-78 figures are 'unimproved capital value'.

(d) Excludes loans.

(e) As from 1955-56, the loan debt of Hobart and Launceston Corporations for tramways has been excluded and treated as a direct liability of the Metropolitan Transport Trust.

(f) From 1961-62 actual interest payments.

(Chapter 6)

Summary of Population at Census Dates, Tasmania (a) (b)

Particulars	Census Date									
	April 1921	June 1933	June 1947	June 1954	June 1961	June 1966	June 1971	June 1976	June 1981	
Population—										
Males	no. 107 743	115 097	129 244	157 129	177 628	187 390	196 442	201 512	208 641	
Females	no. 106 037	112 502	127 834	151 623	172 712	184 045	193 971	201 356	210 316	
Persons	no. 213 780	227 599	257 078	308 752	350 340	371 435	390 413	402 868	418 957	
Masculinity (males per 100 females)	no. 102	102	101	104	103	102	101	100	101	
Average annual increase since previous Census—										
Males	% 1.0	0.6	0.8	2.8	1.8	1.1	1.0	0.5	0.7	
Females	% 1.3	0.5	0.9	2.5	1.9	1.3	1.0	0.8	0.9	
Persons	% 1.1	0.5	0.9	2.7	1.8	1.2	1.0	0.6	0.8	
Age distribution of population—										
Under 16 years	no. 77 654	73 030	77 483	102 171	123 331	127 379	129 307	124 267	116 942	
	% 36.3	32.1	30.1	33.1	35.2	34.3	33.1	30.8	28.0	
16 years and under 65 years	no. 126 055	138 515	159 925	183 230	200 001	214 981	230 069	243 885	261 151	
	% 59.0	60.9	62.2	59.3	57.1	57.9	58.9	60.5	62.3	
65 years and over	no. 10 071	16 054	19 670	23 351	27 008	29 075	31 037	34 719	42 540	
	% 4.7	7.0	7.7	7.6	7.7	7.8	7.9	8.6	9.9	
Religions of the population—										
Church of England	no. 112 222	105 228	123 158	147 407	159 101	166 023	169 089	158 748	151 207	
Methodist	no. 27 171	26 470	33 358	38 236	42 236	43 084	42 173	37 107	19 906	
Catholic (c)	no. 35 465	33 189	39 844	53 042	63 993	71 089	77 250	75 092	78 143	
Presbyterian	no. 14 796	13 194	12 644	15 607	16 757	17 498	17 281	14 899	11 575	
Baptist	no. 5 332	4 666	5 374	6 293	7 227	7 759	8 039	7 940	7 965	
Congregational	no. 4 543	3 963	4 007	4 425	4 193	4 530	4 134	3 266	1 790	
Churches of Christ	no. 1 935	1 892	2 039	2 267	2 507	2 701	2 500	2 188	2 110	
Protestant (undefined)	no. 2 271	1 979	1 661	2 157	1 975	1 924	4 243	3 455	5 217	
Salvation Army	no. 1 357	1 142	1 612	1 815	2 316	2 661	3 176	2 880	3 202	
Uniting Church	no.								17 668	
Other Christian	no. 3 597	3 530	4 518	8 238	11 229	13 058	16 510	18 667	18 631	
Total Christian	no. 208 689	195 253	228 215	279 487	311 534	330 327	344 395	324 242	317 414	
Non-Christian	no. 245	87	173	256	268	485	561	779	1 263	
Indefinite	no. 520	373	797	796	1 766	2 275	993	2 223	11 162	
No Religion	no. 399	159	506	516	775	2 020	44 464	27 624	36 222	
No Reply	no. 3 927	31 727	27 387	27 697	35 997	36 328		47 998	52 896	

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(Chapter 6)

Summary of Population at Census Dates, Tasmania (a) (b)—continued

Particulars	Census Date									
	April 1921	June 1933	June 1947	June 1954	June 1961	June 1966	June 1971	June 1976	June 1981	
Conjugal condition of the population—										
Never married—										
Under 15 years of age	no. 73 444	68 590	73 371	97 452	117 299	120 164	121 323	115 665	109 604	
15 years of age and over	no. 54 297	61 009	53 912	54 890	58 039	64 365	65 213	70 229	80 067	
Total never married	no. 127 741	129 599	127 283	152 342	175 338	184 529	186 536	185 894	189 671	
Married	no. 76 482	86 014	114 625	139 801	157 110	167 421	181 855	185 056	189 442	
Widowed	no. 8 874	10 954	12 933	14 030	15 563	16 959	18 621	19 340	21 362	
Divorced	no. 118	416	1 319	2 002	2 329	2 526	3 401	5 868	10 855	
Not stated	no. 565	616	918	577	(e)	(e)	(e)	(e)	(e)	
Birthplaces of the population—										
Australia	no. 196 268	215 213	247 379	282 491	317 478	335 582	350 150	361 866	371 624	
New Zealand	no. 1 356	1 201	1 030	1 112	1 128	1 237	1 550	1 801	2 421	
United Kingdom and Republic of										
Ireland	no. 12 734	9 588	7 123	14 113	16 741	19 101	22 513	22 913	23 289	
Netherlands	no. 9	11	13	2 340	3 556	3 367	3 183	2 916	3 008	
Germany	no. 389	238	171	1 794	2 223	2 016	2 009	1 886	1 936	
Italy	no. 37	92	64	974	1 536	1 448	1 485	1 423	1 343	
Other European	no. 512	334	325	4 535	5 789	6 033	6 184	5 970	5 530	
Other birthplaces	no. 2 475	922	973	1 393	1 889	2 651	3 339	4 095	9 806	

(a) Full-blood aboriginals excluded from census data prior to 1971.

(b) As recorded. Not adjusted for under-enumeration.

(c) Includes Catholic and Roman Catholic.

(d) The Uniting Church was formed in 1978 from members of the Congregational, Methodist and Presbyterian churches.

(e) Conjugal condition was allocated prior to tabulation in all instances where this information was not stated.

(Chapter 6)

Population; Arrivals and Departures, Tasmania

Year	Estimated Population (a)							Arrivals	Departures (c)	Annual Rate of Increase of Population (d)
	Total at 30 June	Mean: year ended 30 June	Mean: year ended 31 Dec.	Totals at 31 December						
				Persons	Males	Females	Masculinity (b)			
	no.	no.	no.	no.	no.	no.		no.	no.	per cent
1820	n.a.	n.a.	n.a.	5 400	n.a.	n.a.	n.a.	n.a.	n.a.	8.00
1825	n.a.	n.a.	n.a.	14 192	10 979	3 213	342	n.a.	n.a.	21.26
1830	n.a.	n.a.	n.a.	24 279	18 108	6 171	293	n.a.	n.a.	11.35
1835	n.a.	n.a.	n.a.	40 172	28 749	11 423	252	n.a.	n.a.	10.59
1840	n.a.	n.a.	n.a.	45 999	32 040	13 959	230	n.a.	n.a.	2.75
1845	n.a.	n.a.	n.a.	64 291	43 921	20 370	216	n.a.	n.a.	6.91
1850	n.a.	n.a.	n.a.	68 870	44 229	24 641	179	n.a.	n.a.	1.37
1855	n.a.	n.a.	n.a.	69 962	38 680	31 282	124	n.a.	n.a.	0.32
1860	n.a.	n.a.	88 752	89 821	49 653	40 168	124	3 432	2 782	5.12
1865	n.a.	n.a.	93 111	93 967	50 549	43 418	116	3 597	3 691	0.90
1870 (e)	n.a.	n.a.	100 038	100 886	53 517	47 369	113	5 982	5 936	1.44
1875	n.a.	n.a.	104 000	103 739	54 678	49 061	111	6 535	8 083	0.55
1880	n.a.	n.a.	113 648	114 790	60 568	54 222	112	10 411	10 034	2.02
1885	n.a.	n.a.	127 763	128 860	67 712	61 148	111	14 822	15 228	2.33
1890	n.a.	n.a.	143 224	144 787	76 453	68 334	112	29 517	29 086	2.38
1895	n.a.	n.a.	153 701	154 895	80 485	74 410	108	18 767	19 357	1.35
1900	n.a.	n.a.	172 631	172 900	89 763	83 137	108	23 056	25 479	2.21
1905	183 351	183 834	184 478	186 385	95 947	90 438	106	31 116	33 311	1.52
1910	189 807	190 792	191 005	193 803	98 866	94 937	104	35 377	38 159	0.79
1915	195 370	196 320	196 238	197 536	98 653	98 883	100	39 767	44 764	0.38
1920	209 425	208 599	210 350	212 752	107 259	105 493	102	34 829	35 648	1.37
1925	213 991	215 997	215 552	219 364	110 172	109 192	101	40 227	43 757	0.70
1930	219 983	219 269	220 933	225 297	113 505	111 792	102	40 291	41 110	0.48
1935	228 988	229 339	229 867	233 423	118 124	115 299	102	42 470	42 912	0.63
1936	230 104	230 689	231 426	235 773	119 038	116 735	102	49 478	49 452	1.01
1937	233 203	232 651	234 463	239 570	121 136	118 434	102	52 514	51 468	1.61
1938	234 827	235 628	236 328	242 119	122 427	119 692	102	58 113	58 315	1.06
1939	237 419	237 637	238 845	243 256	123 194	120 062	103	(f) 59 330	(f) 60 893	0.47
1940	240 191	240 023	241 134	244 002	123 650	120 352	103	(f) 51 672	(f) 53 644	0.31
1941	239 677	241 009	240 389	242 135	122 153	119 982	102	(f) 49 348	(f) 53 865	-0.77
1942	240 913	240 358	241 087	242 437	122 440	119 997	102	(f) 42 463	(f) 44 834	0.13
1943	242 561	241 704	242 860	244 253	123 067	121 186	102	(f) 20 152	(f) 21 272	0.75
1944	245 616	244 178	245 618	246 889	124 293	122 596	101	n.a.	n.a.	1.08
1945	248 633	246 971	248 596	250 280	125 854	124 426	101	n.a.	n.a.	1.37
1946	251 998	250 309	252 192	254 570	128 007	126 563	101	(g) 24	(f) 159	1.71
1947 (e)	257 078	254 553	257 636	267 936	135 195	132 741	102	(f) 49 920	(f) 40 833	5.25
1948	261 206	261 202	263 445	273 401	138 843	134 558	103	112 666	110 490	2.04
1949	267 062	266 518	270 327	281 343	143 433	137 910	104	117 614	113 232	2.91

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(Chapter 6)

Population; Arrivals and Departures, Tasmania—continued

Year	Estimated Population (a)							Arrivals	Departures (c)	Annual Rate of Increase of Population (d)
	Total at 30 June	Mean: year ended 30 June	Mean: year ended 31 Dec.	Totals at 31 December						
				Persons	Males	Females	Masculinity (b)			
	no.	no.	no.	no.	no.	no.		no.	no.	per cent
1950	275 902	274 493	278 785	290 333	147 103	143 230	103	127 709	122 333	3.20
1951	286 193	283 526	288 294	301 787	153 721	148 066	104	137 341	129 514	3.95
1952	296 299	293 340	298 361	309 558	157 702	151 856	104	130 583	126 979	2.57
1953	304 080	302 529	306 318	316 465	161 305	155 160	104	127 484	125 812	2.23
1954 (e)	308 752	309 416	311 055	319 218	162 393	156 825	104	126 976	128 424	0.87
1955	314 092	312 694	315 565	324 919	165 356	159 563	104	137 834	137 144	1.79
1956	318 470	318 309	321 039	331 340	168 695	162 645	103	143 104	141 686	1.98
1957	326 130	324 666	328 435	338 807	172 186	166 621	103	143 601	141 310	2.25
1958	333 066	332 046	335 382	343 898	174 465	169 433	103	141 814	141 995	1.50
1959	339 376	338 628	341 423	351 349	178 109	173 240	103	162 761	160 569	2.17
1960	343 910	344 111	346 913	355 969	180 511	175 458	103	182 537	183 513	1.31
1961 (e)	350 340	350 077	353 623	353 258	178 864	174 394	103	186 423	184 165	-0.76
1962	355 668	353 175	355 682	358 087	181 085	177 002	102	185 268	186 023	1.37
1963	360 727	358 180	360 590	362 799	183 330	179 469	102	198 443	199 918	1.32
1964	364 311	362 758	364 554	366 508	185 051	181 457	102	219 930	223 380	1.02
1965	367 905	366 366	367 970	369 608	186 483	183 125	102	248 964	249 617	0.85
1966 (e)	371 436	369 600	371 483	373 309	188 180	185 129	102	257 463	256 068	1.00
1967	375 244	373 321	375 397	377 841	190 369	187 472	102	270 934	271 812	1.21
1968	379 649	377 582	379 916	383 055	192 871	190 184	101	276 798	276 856	1.38
1969	384 893	382 710	385 079	386 998	194 788	192 210	101	296 186	297 069	1.03
1970	387 720	386 665	388 180	390 253	196 363	193 890	101	320 867	323 449	0.84
1971 (e)	398 100	n.a. (g)	n.a. (g)	399 500	200 600	198 900	100	340 163	340 642	0.37
1972	400 300	399 400	400 500	401 900	201 600	200 300	100	356 561	355 224	0.56
1973	403 100	401 800	403 200	404 600	202 800	201 800	100	450 707	448 556	0.69
1974	406 200	404 600	406 300	408 800	204 600	204 200	100	508 449	502 488	0.76
1975	410 100	408 300	410 000	411 500	205 900	205 600	100	510 639	514 278	0.97
1976 (e)	412 300	411 300	412 300	413 100	206 600	206 500	100	509 356	507 384	0.54
1977	413 900	413 100	414 100	415 400	207 600	207 800	100	538 665	530 535	0.39
1978	416 400	415 300	416 400	417 500	208 600	208 900	100	557 275	559 293	0.60
1979	418 700	417 500	419 000	421 100	209 900	211 300	99	576 050	574 790	0.55
1980	423 500	421 100	423 300	425 200	211 400	213 800	99	590 680	591 509	1.15
1981 (e)	427 300	425 300	427 200	428 600	212 900	215 700	99	582 644	586 175	0.90

(a) Prior to 1966 excludes Aborigines.

(b) Number of males per 100 females.

(c) Series of recorded interstate arrivals and departures prepared by State Department of Tourism replaces ABS series from 1972.

(d) The rate of increase during the previous 12 months or, in the years prior to 1936, the average (compound) rate of increase during the previous five years.

(e) Census year.

(f) Excludes troop movements.

(g) Not available due to change in series.

(Chapter 6)

Births, Deaths, Marriages and Divorces, Tasmania

Year	Number				Rate per 1 000 of mean population			Deaths under one year of age	
	Births	Deaths	Marriages	Divorces	Births	Deaths	Marriages	Number	Rate per 1 000 live births
	no.	no.	no.	no.					
1820	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1830	480	270	163	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1840	404	501	457	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1845	1 506	697	658	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1850	2 025	1 070	923	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1855	2 948	1 692	1 257	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1860	3 238	1 749	689	n.a.	36.48	19.71	7.76	n.a.	n.a.
1865	3 069	1 263	591	n.a.	32.96	13.56	6.35	n.a.	n.a.
1870	3 054	1 404	670	n.a.	30.53	14.03	6.70	298	97.6
1875	3 105	2 079	689	n.a.	29.86	19.99	6.83	407	131.1
1880	3 739	1 832	840	n.a.	32.90	16.12	7.39	420	112.3
1885	4 637	2 036	1 054	n.a.	36.29	15.94	8.25	522	112.6
1890	4 813	2 118	954	n.a.	33.60	14.79	6.66	508	105.6
1895	4 790	1 811	846	5	31.16	11.78	5.50	391	81.6
1900	4 864	1 903	1 332	4	28.18	11.02	7.72	389	80.0
1905	5 257	1 844	1 365	2	28.50	10.00	7.40	424	80.7
1910	5 586	2 120	1 493	6	29.25	11.10	7.82	568	101.7
1915	5 845	2 015	1 600	7	29.79	10.27	8.15	423	72.4
1920	5 740	2 036	1 999	18	27.29	9.68	9.50	376	65.5
1925	5 218	1 996	1 504	37	24.21	9.26	6.98	288	55.2

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(Chapter 6)

Births, Deaths, Marriages and Divorces, Tasmania—continued

Year	Number				Rate per 1 000 of mean population			Deaths under one year of age	
	Births	Deaths	Marriages	Divorces	Births	Deaths	Marriages	Number	Rate per 1 000 live births
1930	4 786	1 948	1 450	42	21.66	8.82	6.56	242	50.6
1931	4 762	2 057	1 501	47	21.18	9.15	6.68	219	45.9
1932	4 491	2 022	1 508	33	19.78	8.90	6.64	185	41.2
1933	4 553	2 192	1 629	42	19.93	9.60	7.13	187	41.1
1934	4 470	2 345	1 678	60	19.50	10.23	7.32	189	42.3
1935	4 456	2 353	1 875	87	19.39	10.24	8.16	231	51.8
1936	4 581	2 387	2 073	62	19.79	10.31	8.96	227	49.6
1937	4 841	2 225	2 042	30	20.65	9.49	8.71	202	41.7
1938	4 907	2 288	2 082	109	20.76	9.68	8.81	195	39.7
1939	5 004	2 426	2 264	80	20.95	10.16	9.48	203	40.6
1940	4 994	2 387	2 476	83	20.71	9.90	10.27	176	35.2
1941	5 206	2 575	2 150	84	21.66	10.71	8.94	255	49.0
1942	5 305	2 430	2 431	83	22.00	10.08	10.08	255	42.4
1943	5 597	2 527	2 102	89	23.05	10.41	8.66	227	40.6
1944	5 200	2 494	1 935	115	21.17	10.15	7.88	199	38.3
1945	5 785	2 413	1 868	172	23.27	9.71	7.51	159	27.5
1946	6 847	2 549	2 650	219	27.15	10.11	10.51	207	30.2
1947	7 140	2 363	2 584	210	27.71	9.17	10.03	195	27.3
1948	6 979	2 528	2 428	185	26.49	9.60	9.22	193	27.7
1949	7 110	2 389	2 422	266	26.30	8.84	8.96	170	23.9
1950	7 242	2 466	2 560	152	25.96	8.85	9.18	172	23.8
1951	7 357	2 567	2 607	194	25.52	8.93	9.04	196	26.6
1952	7 916	2 579	2 553	217	26.53	8.64	8.56	172	21.7
1953	7 736	2 551	2 424	210	25.25	8.33	7.91	177	22.9
1954	7 770	2 696	2 512	238	24.98	8.67	8.08	186	23.9
1955	8 089	2 489	2 600	233	25.63	7.89	8.24	189	23.4
1956	8 104	2 513	2 601	197	25.24	7.83	8.10	170	21.0
1957	8 435	2 670	2 507	180	25.68	8.13	7.63	170	20.2
1958	8 568	2 708	2 475	176	25.55	8.07	7.38	167	19.5
1959	8 625	2 780	2 567	222	25.26	8.14	7.52	202	23.4
1960	8 853	2 670	2 713	210	25.52	7.70	7.82	169	19.1
1961	8 892	2 789	2 677	286	25.40	7.89	7.57	151	16.8
1962	8 894	2 870	2 485	249	25.01	8.07	6.99	184	20.7
1963	8 530	2 818	2 579	261	23.66	7.82	7.15	153	17.9
1964	8 252	3 174	2 869	230	22.64	8.71	7.87	166	20.1
1965	7 535	3 043	2 888	280	20.48	8.27	7.85	125	16.6
1966	7 401	3 159	2 946	319	19.92	8.50	7.93	108	14.6
1967	7 547	3 228	3 213	248	20.10	8.60	8.56	130	17.2
1968	8 317	3 284	3 426	303	21.89	8.64	9.02	143	17.2
1969	8 445	3 309	3 532	331	21.93	8.59	9.17	139	16.5
1970	8 185	3 174	3 535	426	21.09	8.16	9.11	116	14.2
1971	8 321	3 295	3 578	432	21.32	8.44	9.17	114	13.7
1972	7 824	3 227	3 426	446	19.94	8.22	8.73	127	16.2
1973	7 326	3 347	3 395	444	18.51	8.46	8.58	137	18.7
1974	7 398	3 484	3 567	536	18.52	8.72	8.93	123	16.6
1975	6 982	3 339	3 242	591	17.26	8.26	8.02	128	18.3
1976	6 702	3 389	3 477	1 761	16.44	8.32	8.53	77	11.5
1977	6 735	3 269	3 166	1 134	16.40	7.96	7.71	99	14.7
1978	6 788	3 271	3 148	1 132	16.41	8.00	7.61	97	14.3
1979	6 757	3 167	3 245	1 167	16.17	7.58	7.79	95	14.1
1980	6 735	3 392	3 433	1 285	15.9	7.8	8.2	79	11.7
1981	7 188	3 320	3 515	1 139	16.83	7.77	8.23	86	12.0

(Chapter 7)

Education: Post Secondary and Tertiary, Tasmania, 1900-1982

Year	Vocational Institutions			College of Advanced Education		University	
	Number of colleges	Teaching staff	Students, aggregate enrolment	Teaching staff full-time	Students	Teaching staff full-time	Total students enrolled
1900	1	n.a.	(a) 41	..	..	9	51
1905	4	28	(b) 756	..	..	9	67
1910	4	34	(b) 614	..	..	10	147
1915	5	40	(b) 955	..	..	17	258
1920	4	63	1 152	..	..	23	179
1925	4	64	1 049	..	..	28	173
1930	4	67	950	..	..	29	449
1935	4	83	1 037	..	..	36	229
1940	6	169	2 015	..	..	47	(c) 452
1945	6	206	2 951	..	..	43	503
1950	9	287	5 099	..	..	..	670
1955	(d) 13	(d) 396	(d) 6 151	..	..	(e) 78	783
1960	11	524	7 565	..	..	108	1 332
1961	12	480	6 499	..	..	110	1 460
1962	11	509	6 946	..	..	120	1 572
1963	(f) 10	(f) 539	(f) 7 587	n.a.	n.a.	127	1 691
1964	9	590	7 692	n.a.	n.a.	131	1 863
1965	12	588	7 916	n.a.	n.a.	145	2 083
1966	11	745	7 962	n.a.	n.a.	163	2 346
1967	10	787	8 200	n.a.	n.a.	164	2 443
1968	(g) 7	(g) 845	(g) 8 159	52	1 052	169	2 592
1969	7	774	8 125	52	1 121	193	2 830
1970	7	739	8 069	53	1 134	202	3 119
1971	7	754	6 849	62	1 142	220	3 444
1972	7	566	7 234	115	1 811	248	3 371
1973	6	707	7 519	165	2 003	254	3 263
1974	7	911	9 826	184	2 261	271	3 414
1975	9	866	10 254	203	2 435	280	3 399
1976	10	1 070	11 155	206	2 642	293	3 536
1977	10	967	13 018	201	2 586	298	3 525
1978	11	1 191	14 431	210	2 796	309	3 517
1979	9	1 224	13 507	204	2 827	301	3 435
1980	10	1 274	15 789	196	2 926	301	3 517
1981	10	1 439	19 081	123	2 082	373	5 082
1982	7	1 737	17 522	127	2 180	372	5 210

(a) Average quarterly enrolments.

(b) Individual students.

(c) Gross enrolments from 1936 to 1949; individual enrolments thereafter.

(d) Includes schools at which Senior Technical Classes were held.

(e) Excludes part-time teaching staff from 1952.

(f) Includes School of Art from 1963 and Conservatorium of Music from 1964.

(g) Excludes School of Art, Conservatorium of Music.

(Chapter 7)

Education: Primary and Secondary, Tasmania

Year	Government schools			Non-government schools		
	Number of schools	Teaching staff	Students (a)	Number of schools	Teaching staff	Students (b)
1900	309	(c) 612	24 157	224	n.a.	9 749
1905	343	600	24 043	167	n.a.	8 323
1910	367	677	30 805	124	420	6 278
1915	457	968	35 812	92	322	5 944
1920	470	1 102	39 360	84	317	5 872
1925	515	1 315	39 910	75	312	6 103
1930	508	1 358	40 032	66	326	5 862
1935	516	1 282	39 332	65	324	5 794
1940	431	1 398	37 369	63	329	6 139
1945	356	1 511	35 925	59	321	6 987
1950	332	1 687	46 394	58	375	8 330
1955	291	2 277	60 779	57	424	10 454
1960	287	2 540	65 049	60	544	12 716
1961	289	2 479	66 624	66	570	13 435
1962	286	(d) 2 771	68 346	66	597	13 673
1963	288	2 955	69 633	66	595	14 194
1964	293	3 075	70 643	64	635	14 385
1965	296	3 243	71 615	64	666	14 688
1966	294	3 374	72 461	64	686	14 743
1967	297	3 531	74 265	65	695	14 913
1968	291	3 571	76 109	68	753	14 974
1969	295	3 666	78 339	67	760	14 740

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(Chapter 7)

Education: Primary and Secondary, Tasmania—continued

Year	Government schools			Non-government schools		
	Number of schools	Teaching staff	Students (a)	Number of schools	Teaching staff	Students (b)
1970	283	3 756	79 385	68	810	14 623
1971	283	3 796	80 092	68	775	14 415
1972	280	3 845	79 957	66	791	14 098
1973 (e)	280	3 937	79 705	65	684	14 237
1974 (e)	279	4 099	79 835	65	710	14 407
1975 (e)	285	4 310	80 917	66	736	14 597
1976 (e)	284	4 430	81 182	71	739	14 431
1977 (e)	284	4 511	80 872	70	756	14 446
1978 (e)	291	4 584	80 582	67	757	14 688
1979 (e)	289	4 752	79 537	65	792	14 738
1980	291	4 908	78 611	65	831	14 969
1981	293	4 948	76 775	68	854	15 323

(a) Aggregate enrolment for whole year prior to 1960. From 1960 as at 1 August and excluding adult correspondence students.

(b) Aggregate enrolment for whole year to 1919. From 1920 to 1961 enrolment as at 31 December and thereafter at 1 August.

(c) Includes teachers, pupil-teachers and paid monitors; excludes training college staff, junior monitors, subsidised teachers, etc.

(d) Includes part-time teachers but excludes teachers at special schools from 1962.

(e) Full-time plus full-time equivalent of part-time teachers.

(Chapter 8)

Commonwealth Social Service Benefits Paid in Tasmania

Year	Family allowances, total amount paid (a)	Maternity allowance		Unemployment benefit		Sickness benefit		Special benefit (b)	
		Claims admitted	Amount paid	Claims admitted	Amount paid	Claims admitted	Amount paid	Claims admitted	Amount paid
	\$'000	no.	\$'000	no.	\$'000	no.	\$'000	no.	\$'000
1912-13	—	3 611	n.a.	—	—	—	—	—	—
1944-45	1 057	5 582	n.a.	—	—	—	—	—	—
1949-50	2 483	7 408	n.a.	151	4	2 840	74	126	8
1954-55	(c) 4 065	7 940	255	471	(d) 32	1 943	(d) 103	106	24
1959-60	4 719	8 985	285	3 186	242	1 883	135	130	39
1960-61	5 484	9 007	296	3 995	229	1 893	134	102	39
1961-62	4 993	8 942	289	8 273	696	2 000	163	93	38
1962-63	5 045	8 560	277	7 141	783	2 099	203	111	44
1963-64	6 113	8 437	272	6 720	750	2 167	215	135	52
1964-65	6 306	7 821	251	5 255	583	2 238	201	122	52
1965-66	6 318	7 578	243	2 742	275	2 040	174	122	57
1966-67	6 912	7 606	243	3 166	228	2 147	190	160	47
1967-68	6 612	7 939	254	3 746	264	1 952	165	99	42
1968-69	6 710	8 373	267	3 984	297	2 070	166	403	55
1969-70	7 416	8 130	259	3 825	360	2 194	199	429	68
1970-71	6 686	8 594	274	4 388	366	2 687	327	388	71
1971-72	7 196	8 211	260	8 974	966	2 964	497	418	79
1972-73	8 185	7 615	241	12 536	2 095	3 295	792	459	128
1973-74	7 212	7 296	230	11 642	3 125	3 975	1 247	574	224
1974-75	6 610	7 225	229	22 088	7 746	4 144	1 692	800	443
1975-76	7 766	7 210	215	30 930	15 256	5 018	2 409	1 760	811
1976-77	31 197	6 729	215	23 981	17 963	4 662	2 380	1 827	979
1977-78	30 968	6 836	213	27 337	23 398	4 284	2 385	1 792	804
1978-79 (e)	28 924	n.a.	91	26 294	28 609	3 881	2 024	2 071	1 299
1979-80	30 549	—	—	26 316	29 665	3 554	2 299	2 051	1 487
1980-81	27 765	—	—	28 234	34 658	3 626	2 901	3 463	2 372
1981-82	122 793	—	—	32 147	49 233	3 707	3 595	3 999	2 956

(a) Known as 'child endowment' up to 1975-76; replaced by increased 'family allowances' from 1 July 1976 in conjunction with abolition of tax rebates in respect of dependent children.

(b) Includes payments to migrants.

(c) Endowment extended to first child from 20 June 1950.

(d) Rates payable were doubled from 22 September 1952.

(e) Maternity allowance ceased 1 November 1978.

(Chapter 8)

Commonwealth Pensions: Tasmania

Year	Age and invalid pensions						War pensions (a)		Widows' pensions	
	Number of pensioners		Expenditure on pensions		Weekly rate (b)	Operative from	Number in force	Amount paid	Number in force	Amount paid
	Age	Invalid	Age	Invalid						
	no.	no.	\$'000	\$'000	\$	date	no.	\$'000	no.	\$'000
1909-10	3 245	—	159	—	1.00	1.7.1909	—	—	—	—
1914-15	4 528	1 349	223	68	1.00	..	—	—	—	—
1919-20	4 806	1 947	364	145	1.50	13.9.1923	9 551	524	—	—
1924-25	5 856	2 036	503	180	1.75	8.10.1925	10 770	590	—	—
1929-30	7 678	2 456	753	248	2.00	23.7.1931	12 321	695	—	—
1934-35	8 495	2 975	737	263	1.75	26.12.1940	12 523	724	—	—
1939-40	10 614	2 552	1 055	256	2.10	19.8.1943	11 729	808	—	—
1944-45	9 512	2 699	1 271	368	2.70	21.10.1948	12 081	1 103	1 564	207
1949-50	11 402	3 158	2 359	670	4.25	2.11.1950	19 168	2 036	1 384	314
1950-51	11 548	2 885	2 819	724	5.00	1.11.1951	21 407	2 595	1 366	323
1951-52	11 716	2 762	3 457	831	6.00	2.10.1952	22 863	3 121	1 358	376
1952-53	12 380	2 602	4 107	879	6.75	29.10.1953	23 966	3 429	1 380	441
1953-54	12 906	2 605	4 358	908	7.00	..	24 935	3 641	1 371	461
1954-55	13 679	2 681	4 795	967	7.00	27.10.1955	25 731	3 934	1 409	475
1955-56	14 074	2 596	5 605	1 063	8.00	..	26 483	4 035	1 419	537
1956-57	14 847	2 812	5 887	1 183	8.00	24.10.1957	26 751	4 054	1 476	607
1957-58	15 114	2 883	6 527	1 315	8.75	..	27 238	4 424	1 581	677
1958-59	15 434	3 070	6 660	1 419	8.75	8.10.1959	27 621	4 458	1 663	741
1959-60	15 835	3 206	7 471	1 605	9.50	..	28 048	4 832	1 773	833
1960-61	16 552	3 338	(c) 10 101	10.00	6.10.1960	28 305	5 166	1 849	940	
1961-62	17 522	3 299	11 404	10.50	5.10.1961	28 398	4 988	1 912	1 037	
1962-63	17 760	3 343	11 717	10.50	..	28 214	5 668	1 977	1 084	
1963-64	18 303	3 363	12 343	11.50	14.11.1963	27 913	6 158	2 109	1 467	
1964-65	18 892	3 532	13 184	12.00	1.10.1964	27 109	6 214	2 248	1 699	
1965-66	19 181	3 444	13 439	12.00	..	26 446	6 919	2 327	1 791	
1966-67	19 590	3 530	14 574	13.00	13.10.1966	25 629	6 645	2 432	1 988	
1967-68	20 411	3 548	15 414	13.00	..	25 015	6 790	2 588	2 125	
1968-69	21 029	3 819	16 768	14.00	10.10.1968	24 485	7 622	2 678	2 465	
1969-70	23 915	4 051	19 517	15.00	9.10.1969	23 807	7 835	2 958	2 927	
1970-71	24 894	4 316	21 835	15.50	8.10.1970	23 254	8 230	3 138	3 327	
1971-72	25 668	4 498	25 543	16.00	8.4.1971		9 094	3 205	3 842	
1972-73	29 107	4 855	33 656	17.25	7.10.1971	22 512	9 857	3 600	5 136	
1973-74	31 904	5 087	43 032	18.25	4.5.1972	21 905	11 176	3 932	6 582	
1974-75	34 269	5 460	60 118	20.00	Aug. 1972	21 987	13 697	4 103	8 521	
1975-76	35 594	6 091	77 976	21.50	Mar. 1973	21 474	14 827	4 209	11 221	
1976-77	36 954	6 612	91 788	23.00	Aug. 1973	20 778	16 637	4 572	12 455	
1977-78	38 204	6 205	107 203	26.00	Apr. 1974	20 062	18 676	5 001	14 660	
1978-79	38 885	6 427	117 678	31.00	Aug. 1974	18 844	18 696	5 229	16 621	
1979-80	39 566	6 376	127 382	36.00	Apr. 1975	17 502	19 389	5 358	18 884	
1980-81	40 000	6 487	142 519	61.05	May 1980	16 944	21 918	5 230	21 003	
1981-82	40 413	6 615	163 130	74.15	May 1982	16 879	22 965	5 153	23 160	

(a) Excludes pensions in respect of the Boer War which are paid by the United Kingdom.

(b) Maximum single rate payable; subject to Means Test.

(c) Separate figures for age and invalid pensions not available from 1960-61.

(Chapter 10)

Consumer Price Index Numbers, Hobart (a)

Year	Food	Clothing	Housing	Household equipment and operation	Transport- ation	Tobacco and alcohol	Health and personal care	Recreation and Education	All groups Index no.	Increase per cent (b)
1949-50	13.2	17.6	12.1	n.a.	n.a.	n.a.	n.a.	n.a.	14.8	6.5
1954-55	23.9	26.5	18.4						24.0	—
1955-56	25.4	26.8	20.2						25.2	5.0
1956-57	26.5	27.6	22.1						26.7	6.0
1957-58	25.7	28.3	22.8						26.7	—
1958-59	26.1	28.6	23.4						27.1	1.5
1959-60	26.5	28.8	24.6						27.6	1.8
1960-61	29.5	29.2	26.0	34.9	31.1	32.2	n.a.	n.a.	29.1	5.4
1961-62	28.8	29.6	27.1						29.3	0.7
1962-63	28.4	29.8	28.0						29.3	—
1963-64	28.4	29.9	28.8						29.6	1.0
1964-65	30.0	30.3	30.0						30.5	3.0
1965-66	31.6	30.7	30.8						31.6	3.6
1966-67	32.0	31.3	31.7						32.3	2.2
1967-68	34.1	32.0	32.9	36.2	32.4	32.9			33.7	4.3
1968-69	33.6	32.7	34.4	37.0	33.6	33.8			34.2	1.5
1969-70	34.0	33.8	35.7	37.5	34.6	34.5	29.1		35.0	2.3
1970-71	35.0	35.0	37.2	38.7	36.1	37.2	29.3	n.a.	36.3	3.7
1971-72	36.1	37.1	39.4	41.7	39.4	40.1	34.0		38.7	6.6
1972-73	38.3	39.3	41.8	43.2	41.1	43.4	35.7		40.9	5.7
1973-74	45.2	44.5	46.6	46.4	43.4	49.2	40.0		46.0	12.5
1974-75	50.7	53.7	57.4	54.6	51.4	54.5	49.4		53.8	17.0
1975-76	56.7	62.8	68.6	64.2	61.2	66.4	39.3		61.3	13.9
1976-77	64.4	72.7	77.7	70.5	68.6	71.5	71.0		70.2	14.5
1977-78	71.2	80.4	83.9	76.8	75.1	74.7	85.8		77.1	9.8
1978-79	80.3	86.7	88.2	82.4	79.7	86.4	82.9		83.1	7.8
1979-80	91.6	93.1	93.1	89.8	90.6	93.1	90.7		91.6	10.2
1980-81	100.0	100.0	100.0	100.0	100.0	100.0	100.0	n.a.	100.0	9.2
1981-82	108.7	106.4	107.4	110.0	112.8	109.1	120.5		110.0	10.0

(a) Base of each index: year 1966-67 = 100.0 except 'Health and personal care' (December quarter 1968 = 100.0) and 'Recreation' (September quarter 1976 = 100.0).

(b) Over previous year.

(Chapter 10)

Employment; Unemployment; Wage Rates and Earnings, Tasmania

Year	Unemployment				Prescribed weekly wage rates, adult males, Hobart at 31 December		Average wage rates and earnings, Tasmania		
	Civilian employees at 30 June	Labour force surveys (a)	Persons registered with C'wealth employment service (b)	Persons receiving unemploy- ment benefits (c)	Basic wage (d)	Minimum wage (e)	Weighted average minimum weekly wage rates, adult males at 31 December (f)	Average weekly earnings per employed male unit for June atr.	
	(^{'000})	(^{'000})	no.	no.	\$	\$	\$	Amount	Increase (g) per cent
1939 .....			..	..	7.70	..	9.22	n.a.	n.a.
1940 .....			..	..	8.10	..	9.61		
1941 .....			..	..	8.50	..	10.35		
1942 .....			..	..	9.20	..	11.17		
1943 .....			..	..	9.50	..	11.58		
1944 .....			..	..	9.40	..	11.53		
1945 .....			..	..	9.40	..	11.56		
1946			n.a.	83	10.30	..	12.45		
1947			243	44	10.70	..	13.54		
1948			204	28	11.80	..	15.19		
1949	n.a.	n.a.	276	32	12.80	..	16.43	16.66	16.0
1950			208	32	16.00	..	19.80	19.32	
1951			169	10	19.90	..	23.82	23.74	22.9
1952			643	104	23.00	..	27.22	29.08	22.5
1953			812	323	24.20	..	28.33	30.86	6.1
1954			555	109	24.20	..	28.77	32.78	6.2
1955			560	52	24.20	..	29.36	35.86	9.4
1956			553	71	25.20	..	31.39	37.80	5.4
1957			1 585	410	26.20	..	31.85	39.20	3.7
1958			2 231	639	26.70	..	32.36	40.20	2.6
1959			2 109	670	28.20	..	34.71	40.30	0.3
1960			2 204	522	28.20	..	35.15	44.50	10.4

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(Chapter 10)

Employment; Unemployment; Wage Rates and Earnings, Tasmania—continued

Year	Unemployment				Prescribed weekly wage rates, adult males, Hobart at 31 December		Average wage rates and earnings, Tasmania		
	Civilian employees at 30 June	Labour force surveys (a)	Persons registered with C'wealth employment service (b)	Persons receiving unemployment benefits (c)	Basic wage (d)	Minimum wage (e)	Weighted average minimum weekly wage rates, adult males at 31 December (f)	Average weekly earnings per employed male unit for June qtr.	
								Amount	Increase (g)
								\$	per cent
	('000)	('000)	no.	no.	\$	\$	\$	\$	
1961			3 213	1 416	29.40	..	36.27	44.70	0.4
1962			3 609	1 778	29.40	..	36.48	47.80	6.9
1963	n.a.		3 427	1 777	29.40	..	37.29	48.30	1.0
1964			2 968	1 399	31.40	..	39.69	49.90	3.3
1965			2 235	946	31.40	..	40.73	52.70	5.6
1966	115.4	n.a.	1 695	457	33.40	..	43.27	(h) 55.20	4.7
1967	118.7		2 116	546	34.40	38.15	45.31	60.10	8.9
1968	121.8		2 088	635	35.75	40.45	48.98	63.20	5.2
1969	124.6		2 120	600	36.80	43.00	52.00	67.70	7.1
1970	127.8		1 888	437	36.80	43.00	54.49	74.30	9.7
1971	125.5	n.a.	2 682	873	39.00	47.00	60.86	84.80	14.1
1972	126.8	3.5	3 498	1 697	41.00	51.70	67.18	92.00	8.5
1973	129.2	4.2	3 718	2 330	43.50	60.70	76.80	102.00	10.9
1974	133.7	4.4	3 310	1 769	46.00	68.70	106.02	121.10	18.7
1975	137.3	6.7	6 190	4 439	50.00	83.50	117.27	151.40	25.0
1976	135.0	8.5	8 986	7 228	62.90	102.30	134.14	165.10	9.0
1977	137.1	10.2	8 786	7 078	72.40	114.00	147.58	185.50	12.4
1978	137.3	10.8	11 944	9 757	77.50	121.90	159.23	201.10	8.4
1979	137.9	11.2	12 791	10 420	(i) 80.00	(i) 125.80	166.84	217.80	8.3
1980	n.a.	11.7	13 344	11 121	87.10	137.00	184.83	247.30	13.5
1981	n.a.	10.1	n.a.	12 929	93.60	147.20	211.70	278.40	12.6
1982	n.a.	17.5	n.a.	16 263	93.60	168.00	n.y.a.	n.a.	n.a.

(a) At May each year except for June in 1978.

(b) Persons on register on Friday nearest the end of June who claimed, when registering with the Commonwealth Employment Service, that they were not employed and who were recorded as unplaced. Includes those referred to employers and those who may have obtained employment without notifying the Commonwealth Employment Service and also those receiving unemployment benefit. The Commonwealth Employment Service commenced operating in May 1946. (Source: Department of Employment and Youth Affairs.)

(c) Persons on benefit on last Saturday of June. Unemployment Benefit was first paid in July, 1945. (Source: Department of Social Security.)

(d) The rates shown up to and including 1966 are those in Commonwealth awards. State Wages Boards awards are shown from 1967. The Commonwealth and State rates prior to 1967 were identical except between 1956 and 1959 when the State's rates were slightly higher.

(e) The Tasmanian Wages Boards introduced the concept of the minimum wage in June 1967.

(f) Wage rates used to compile the index are the minimum rates prescribed for particular occupations in Commonwealth or State awards and in registered (and in some cases unregistered) agreements.

(g) Over June quarter of previous year.

(h) Earnings shown from 1967 are not strictly comparable with those for earlier years.

(i) Tasmanian decision of 13 July 1979 following National Wage Case decision of 27 June 1979.

(Chapter 10)

Average Retail Prices (a) of Selected Items of Foodstuffs: Hobart (Cents)

Year	Bread (b)	Tea	Sugar	Pota-toes	Butter (fact-ory)	Eggs 1 doz	Bacon rashers	Beef rib without bone	Corned beef (bris-ket) (c)	Mutton (leg) (c)	Mutton chops (loin) (c)	Pork (leg)
	680 g	250 g	2 kg	1 kg	500 g	55 g	250 g	1 kg	1 kg	1 kg	1 kg	1 kg
1901	2.3	6.8	9.3	1.4	12.5	10.6	9.3	11.2	9.3	9.0	10.4	11.7
1906	2.4	6.8	9.3	2.2	11.6	12.9	7.9	11.7	9.3	9.7	10.6	11.2
1911	2.6	6.8	9.7	4.7	12.1	12.1	11.9	11.7	9.3	8.6	10.6	11.2
1916	3.2	7.9	12.8	2.1	17.5	14.4	15.5	41.4	16.8	18.1	19.4	21.4
1921	5.4	9.6	22.0	1.9	23.7	18.8	19.4	22.0	18.1	17.6	20.1	28.7
1926	4.6	12.0	16.3	3.7	21.2	16.2	16.4	20.3	15.7	17.6	20.7	24.0
1931	3.7	12.6	16.8	1.9	17.1	12.0	13.0	16.5	13.0	10.8	14.8	17.9
1936	3.4	12.8	17.9	2.4	15.0	14.9	11.1	15.0	14.6	15.4	16.8	18.1
1941	4.6	16.8	17.9	2.4	18.4	15.9	16.0	19.8	16.5	15.9	17.2	23.1
1946	4.6	12.5	17.9	2.2	19.3	20.5	19.3	24.7	20.1	21.2	21.2	26.0
1951	7.8	21.3	21.2	7.6	27.9	40.8	21.8	42.3	38.1	42.1	40.1	67.2
1956	12.4	40.3	36.6	20.5	51.0	54.1	34.6	73.4	55.6	55.6	43.9	106.3
1957	12.8	39.1	38.4	11.1	50.5	54.8	35.4	72.1	52.9	54.0	42.1	104.1
1958	13.2	38.6	38.4	9.0	49.7	54.6	34.2	74.7	54.5	52.7	39.0	102.5
1959	13.6	38.4	38.4	12.0	50.0	55.0	34.4	79.4	59.3	49.2	33.7	103.8
1960	14.1	37.8	41.0	10.9	51.6	55.0	37.7	92.2	73.2	54.9	41.9	118.8

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(Chapter 10)

Average Retail Prices (a) of Selected Items of Foodstuffs: Hobart
(Cents)—continued

Year	Bread (b)	Tea	Sugar	Pota- toes	Butter (fact- ory)	Eggs 1 doz	Bacon rashers	Beef rib without bone	Corned beef (bris- ket) (c)	Mutton (leg) (c)	Mutton chops (loin) (c)	Pork (leg)
	680 g	250 g	2 kg	1 kg	500 g	55 g	250 g	1 kg	1 kg	1 kg	1 kg	1 kg
1961	14.5	38.3	42.3	20.2	52.4	57.1	39.5	98.3	85.8	56.2	45.9	119.5
1962	14.9	37.1	42.3	12.7	52.6	56.1	38.5	89.7	74.5	51.8	39.7	113.1
1963	15.2	36.5	42.3	9.3	53.2	57.6	39.5	95.2	76.9	54.7	41.0	123.5
1964	15.3	36.3	42.1	14.8	53.9	56.1	42.8	98.8	79.6	58.6	47.6	130.1
1965	15.7	36.3	41.8	20.5	54.7	60.2	49.6	111.3	87.3	65.7	55.8	136.5
1966	17.0	36.5	41.8	11.3	56.7	63.0	52.7	119.0	94.6	69.2	57.5	140.2
1967	18.0	36.6	46.0	15.5	57.3	65.7	54.9	125.9	100.5	71.4	62.2	145.1
1968	19.1	36.4	49.0	15.2	57.3	62.2	56.3	122.1	138.9	108.5	111.8	149.5
1969	20.1	35.2	49.2	13.4	59.7	68.3	54.6	116.0	135.8	106.3	108.0	147.5
1970	21.3	33.9	49.0	14.1	60.6	67.7	55.6	122.6	138.9	197.6	109.3	147.5
1971	23.5	35.3	48.0	14.5	62.0	64.4	55.2	127.4	144.4	107.4	107.6	148.8
1972	24.9	36.7	48.4	16.3	63.9	67.4	56.9	127.2	149.9	113.3	114.0	151.9
1973	27.0	35.6	47.9	20.5	63.9	75.2	57.6	145.3	175.0	148.8	149.3	171.3
1974	31.2	37.2	48.0	30.4	67.5	58.8	75.6	153.9	201.3	170.9	174.8	220.0
1975	39.2	49.7	52.4	19.6	77.0	93.7	91.9	136.7	180.8	171.5	173.1	256.6
1976	45.1	53.0	56.7	33.7	85.2	109.2	111.6	163.1	201.1	197.1	198.2	302.7
1977	48.8	92.3	63.5	26.6	91.5	123.4	123.0	181.4	218.7	238.9	240.0	326.1
1978	52.0	88.5	68.8	35.8	91.3	128.5	126.5	202.3	247.5	269.8	277.8	344.5
1979	57.0	79.5	85.3	39.5	94.8	138.5	149.5	333.8	379.5	332.8	349.3	415.3
1980	63.8	77.3	95.3	45.0	104.8	147.5	170.5	392.0	441.8	357.5	371.0	464.0
1981	72.0	79.5	102.0	51.5	119.0	161.3	182.5	404.25	447.5	357.5	378.8	490.3

(a) In almost all cases the table units are not necessarily those for which the original price data were obtained. In such cases, prices have been calculated for the table unit.

(b) Prior to 1978, bread delivered, 900 g.

(c) From 1968 prices shown are for 'Silverside, lamb (leg), lamb chops (loin)', respectively.

(Chapter 11)

Building Jobs Approved, Tasmania

Building approvals								
Year	New houses		Other new dwellings		Total new dwellings		Alterations and additions to dwellings Value (\$'000) (a)	Other building Value (\$'000)
	No.	Value	No.	Value	No.	Value		
		(\$'000)		(\$'000)		(\$'000)		Total all building Value (\$'000)
1959-60	2 546	16 134	187	926	2 733	17 060		22 099
1960-61	2 273	15 190	152	895	2 425	16 085		14 454
1961-62	2 527	16 486	119	467	2 646	16 953		20 851
1962-63	2 471	16 542	173	814	2 644	17 356		20 060
1963-64	2 648	18 845	165	886	2 813	19 731		14 790
1964-65	2 669	20 209	252	1 413	2 921	21 622		23 250
1965-66	2 428	19 083	218	1 355	2 646	20 438		28 432
1966-67	3 218	25 777	227	1 476	3 445	27 253	n.a.	26 340
1967-68	3 309	30 083	425	2 522	3 734	32 605		39 414
1968-69	2 694	25 893	438	2 904	3 132	28 797		23 494
1969-70	2 656	26 631	781	5 545	3 437	32 176		27 358
1970-71	2 581	26 618	610	4 036	3 191	30 654		37 337
1971-72	2 484	28 430	909	6 773	3 393	35 203		34 879
1972-73	3 058	39 454	768	6 393	3 826	45 847		44 574
1973-74	3 282	51 798	893	8 771	4 175	60 569	797	39 353
1974-75	2 627	51 460	732	9 678	3 359	61 138	1 163	50 433
1975-76	3 380	82 908	1 056	18 715	4 436	101 623	2 326	56 441
1976-77	3 314	89 367	1 088	21 159	4 402	110 526	3 877	86 160
1977-78	2 778	78 138	911	17 959	3 689	96 097	4 817	86 816
1978-79	2 834	83 429	810	17 779	3 644	101 208	5 089	77 119
1979-80	2 511	81 479	804	17 165	3 315	98 644	5 828	91 442
1980-81	2 327	81 713	873	19 992	3 200	101 705	6 950	73 190

(a) Prior to 1973-74, alterations and additions valued at \$10 000 or more to dwellings were included with the number and value of dwellings.

Particulars	Date of Census									
	April 1921	June 1933	June 1947	June 1954	June 1961	June 1966	June 1971	June 1976	June 1981	
Dwellings (including hotels, boarding houses, flats, etc.)—										
Occupied	45 818	52 484	62 484	78 789	91 528	99 366	110 483	122 573	136 269	
Unoccupied	2 934	2 421	2 351	5 288	8 582	10 800	13 302	15 786	17 765	
Total	48 752	54 905	64 835	84 077	99 840	110 166	123 785	138 359	154 034	
Average inmates per occupied dwelling	4.67	4.34	4.11	3.92	3.84	3.74	3.53	3.29	3.07	
Occupied private dwellings according to—										
Class of dwelling—										
Private house (including share) (a)	42 028	48 479	58 937	74 244	83 736	90 131	99 401	100 534	119 573	
Flat (including apartment)	2 404	2 831	2 604	2 534	5 574	7 058	8 417	21 298	16 025	
Other			461	869	888	1 093	1 785			
Total	44 432	51 310	61 462	77 647	90 198	98 282	109 603	121 832	135 598	
Nature of occupancy—										
Owner	16 851	20 404	28 377	38 436	42 896	67 685	73 267	38 852	44 740	
Purchaser by instalments	4 364	3 986	4 140	9 810	19 006					
Tenant	19 037	22 734	26 077	26 991	25 938					
Other methods of occupancy (including not stated)	4 180	4 186	2 868	2 410	2 358	5 000	5 753	8 910	11 972	

(a) Separate house for 1976.

Year	Building approvals	Building construction								
		Commenced			Completed			Under construction at 30 June		
		New dwellings	Other building	Total all building	New dwellings	Other building	Total all building	New dwellings	Other building	Total all building
1946-47	6 726	3 728	1 708	5 436	2 308	526	2 834	3 614	1 904	5 518
1947-48	8 358	5 256	1 958	7 214	3 492	1 066	4 558	5 532	2 760	8 292
1948-49	11 742	7 960	2 782	10 742	6 042	1 578	7 620	7 670	4 074	11 744
1949-50	16 740	11 702	5 056	16 758	8 426	2 258	10 684	11 368	6 612	17 980
1950-51	21 694	15 000	5 672	20 672	13 508	3 298	16 806	14 250	10 106	24 356
1951-52	20 042	15 360	6 766	22 126	16 414	4 608	21 022	14 504	13 036	27 540
1952-53	15 984	10 664	2 558	13 222	15 252	6 078	21 330	10 608	10 380	20 988
1953-54	21 646	13 552	4 896	18 448	13 520	5 864	19 384	11 532	12 032	23 564
1954-55	25 612	15 244	6 428	21 672	13 092	8 206	21 298	13 992	10 806	24 798
1955-56	25 074	13 842	5 936	19 778	15 138	10 458	25 596	13 230	6 498	19 728
1956-57	30 964	15 138	13 138	28 276	16 434	8 784	25 218	12 420	11 750	24 170
1957-58	27 232	14 980	10 486	25 466	15 844	9 836	25 680	11 866	12 026	23 892
1958-59	27 592	16 662	12 156	28 818	15 986	10 914	26 900	12 742	13 364	26 106
1959-60	39 159	15 834	20 652	36 486	16 570	15 036	31 606	12 026	19 156	31 182
1960-61	30 539	15 936	12 344	28 280	17 206	16 822	34 028	10 912	15 016	25 928
1961-62	37 804	17 026	18 360	35 386	16 630	16 824	33 454	11 136	16 640	27 776
1962-63	37 416	16 668	17 944	34 612	16 892	17 240	34 128	10 912	17 500	28 412
1963-74	34 521	18 944	15 720	34 664	18 070	15 906	33 976	11 764	17 330	29 094
1964-65	44 872	20 922	21 118	42 040	20 060	17 684	37 744	12 628	20 738	33 366
1965-66	48 870	19 200	24 589	43 789	19 010	20 670	39 680	12 761	24 651	37 412
1966-67	53 593	25 869	36 208	62 070	23 230	24 986	48 218	15 394	35 875	51 269
1967-68	72 021	29 791	33 359	63 153	30 078	31 805	61 881	15 095	37 411	52 504
1968-69	52 291	28 011	28 191	56 202	28 142	28 807	56 947	14 634	37 262	51 896
1969-70	59 534	32 326	29 805	62 131	32 170	34 282	66 452	14 675	36 347	51 022
1970-71	67 991	32 233	37 956	70 189	29 275	30 409	59 684	17 906	45 559	63 465
1971-72	70 083	32 219	32 100	64 319	31 699	38 018	69 717	19 262	42 374	61 636
1972-73	90 421	43 328	47 279	90 607	36 190	41 915	78 105	27 418	49 104	76 522
1973-74 (a)	100 719	57 579	49 546	107 125	48 259	40 687	88 946	38 416	58 947	97 363
1974-75	112 736	59 641	53 539	113 180	58 182	41 311	99 493	42 436	73 883	116 319
1975-76	160 390	94 481	62 360	156 840	77 130	67 979	145 109	65 067	75 427	140 494
1976-77	200 562	100 636	77 938	178 574	102 888	71 674	174 563	67 915	85 758	153 674
1977-78	187 729	95 941	96 314	192 255	105 701	87 319	193 019	61 583	99 732	161 316
1978-79	183 416	105 265	106 141	211 406	99 460	74 968	174 427	73 161	133 694	206 854
1979-80	195 912	95 771	82 821	178 591	106 452	111 180	217 633	62 278	117 250	179 529
1980-81 (b)	191 845	109 700	99 727	209 400	111 600	122 815	234 400	56 800	109 916	166 700

(a) Alterations and additions to dwellings valued at \$10 000 and over are included with the value of dwellings up to 1972-73 but excluded thereafter; from 1973-74 the value of alterations and additions to dwellings valued at \$10 000 and over is included with 'other building'.

(Chapter 12)

Land Settlement: Land Utilisation, Tasmania
(⁰⁰⁰ ha)

Land settlement (a)					Land utilisation on rural establishments				
Year (b)	Land		Crown land		Year	Area under		Balance of area	Total area of rural estab.
	Alienated	In process of alienation	Leased or licensed (c)	Other		Crops (d)	Sown grasses (d)		
1860	1 242	}	(e)	(e)	1860-61	62	(e)	(e)	(e)
1870	1 540				1870-71	64			
1880	1 713				1880-81	57			
1890	1 900				1890-91	64			
1900	1 957		513	4 364	1900-01	91	124	1 782	1 996
1910	1 996	447	591	3 799	1910-11	116	200	1 862	2 178
1920	2 121	390	920	3 402	1920-21	120	267	2 216	2 603
1930	2 315	219	1 122	3 177	1930-31	108	305	2 241	2 654
1931	2 323	209	1 075	3 227	1931-32	100	262	2 265	2 627
1932	2 331	203	1 057	3 243	1932-33	113	262	2 294	2 669
1933	2 337	197	1 061	3 238	1933-34	117	272	2 313	2 701
1934	2 349	189	1 094	3 201	1934-35	118	291	2 348	2 757
1935	2 358	180	1 104	3 191	1935-36	98	292	2 414	2 805
1936	2 366	179	1 074	3 215	1936-37	107	304	2 362	2 773
1937	2 372	177	1 115	3 170	1937-38	103	309	2 322	2 734
1938	2 379	175	1 090	3 189	1938-39	98	308	2 336	2 743
1939	2 385	175	1 053	3 196	1939-40	104	311	2 328	2 743
1940	2 392	171	1 098	3 172	1940-41	103	313	2 282	2 698
1941	2 400	169	1 129	3 135	1941-42	114	318	2 316	2 748
1942	2 411	163	1 113	3 146	1942-43	121	n.a.	n.a.	2 641
1943	2 418	162	1 140	3 113	1943-44	136	164	2 287	2 587
1944	2 427	168	1 134	3 104	1944-45	139	165	2 331	2 635
1945	2 439	165	1 123	3 107	1945-46	132	234	2 256	2 622
1946	2 448	161	1 110	3 115	1946-47	123	230	2 237	2 590
1947	2 460	157	1 100	3 116	1947-48	112	223	2 167	2 502
1948	2 473	153	1 087	3 121	1948-49	112	268	2 098	2 478
1950	2 486	148	1 134	3 065	1949-50	118	308	2 169	2 594
1951	2 496	145	1 080	3 112	1950-51	122	322	2 176	2 621
1952	2 514	142	1 108	3 069	1951-52	124	237	2 155	2 605
1953	2 525	139	1 111	3 058	1952-53	130	326	2 198	2 654
1954	2 534	137	1 055	3 107	1953-54	142	336	2 156	2 635
1955	2 516	134	1 018	3 136	1954-55	132	363	2 177	2 672
1956	2 554	126	1 010	3 143	1955-56	137	400	2 145	2 682
1957	2 561	127	655	3 490	1956-57	122	424	2 088	2 634
1958	2 568	84	623	3 558	1957-58	122	458	2 070	2 649
1959	2 575	81	615	3 562	1958-59	144	461	2 055	2 660
1960	2 584	77	618	3 554	1959-60	135	491	2 009	2 635
1961	2 591	86	626	3 531	1960-61	153	487	1 995	2 635
1962	2 597	80	606	3 551	1961-62	155	508	1 988	2 651
1963	2 602	80	586	3 565	1962-63	165	515	1 919	2 599
1964	2 670	89	628	3 446	1963-64	158	552	1 871	2 581
1965	2 679	83	595	3 476	1964-65	167	576	1 855	2 598
1966	2 677	84	540	3 531	1965-66	158	622	1 849	2 629
1967	2 692	100	535	3 506	1966-67	181	628	1 825	2 633
1968	2 692	93	478	3 571	1967-68	170	680	1 813	2 663
1969	2 693	96	465	3 579	1968-69	193	618	1 776	2 667
1970	2 697	100	442	3 594	1969-70	169	737	1 732	2 637
1971	2 702	99	381	3 651	1970-71	172	747	1 712	2 631
1972	2 697	100	274	3 760	1971-72	147	772	1 688	2 607
1973	2 729	133	248	3 723	1972-73 (f)	80	856	1 656	2 592
1974	2 731	135	236	3 728	1973-74	74	920	1 567	2 561
1975	2 755	159	223	3 693	1974-75	67	921	1 504	2 492
1976	2 751	154	229	3 696	1975-76 (g)	60	935	1 464	2 459
1977	2 743	146	163	3 778	1976-77 (g)	65	904	1 340	2 308
1978	2 517	120	165	4 028	1977-78	70	910	1 302	2 281
1979	2 494	96	148	4 092	1978-79	80	904	1 247	2 232
1980	2 487	90	n.a.	n.a.	1979-80	78	895	1 256	2 229
1981	2 486	90	n.a.	n.a.	1980-81	84	903	1 234	2 220

(a) Area of State, 68 300 square kilometres.

(b) At 31 December until 1948; at 30 June for 1950 and subsequent years.

(c) Excludes areas under pulpwood concessions and exclusive forest permits.

(d) Area of sown grasses cut for hay, seed and green fodder is included under 'crops'.

(e) Not available on a comparable basis.

(f) From 1972-73 area of sown grasses cut for hay, seed and green fodder are included under 'sown grasses'.

(g) Not strictly comparable with earlier years due to changes in definition of a 'rural establishment'.

(Chapter 12)

Area and Production of Principal Crops, Tasmania

Year	Barley for grain			Oats for grain			Wheat for grain			Blue peas		
	Area	Total production	Yield per hectare	Area	Total production	Yield per hectare	Area	Total production	Yield per hectare	Area	Total production	Yield per hectare
	ha	tonnes	tonnes	ha	tonnes	tonnes	ha	tonnes	tonnes	ha	tonnes	tonnes
1860-61	2 524	2 877	1.14	12 263	16 844	1.37	26 891	38 267	1.42	n.a.	n.a.	n.a.
1870-71	3 082	3 676	1.19	12 523	12 568	1.00	23 222	24 240	1.04			
1880-81	3 358	3 844	1.14	8 034	7 990	0.99	20 243	20 271	1.00			
1890-91	1 771	2 269	1.28	8 393	9 444	1.13	13 133	17 378	1.32			
1900-01	1 822	2 657	1.46	18 240	25 580	1.40	20 973	30 011	1.43			
1910-11	2 119	3 234	1.53	25 854	37 515	1.45	21 142	30 290	1.43	060	4 589	0.91
1919-20	2 547	2 739	1.08	19 500	22 587	1.16	4 653	5 773	1.24			
1920-21	2 489	3 667	1.47	20 426	27 530	1.35	11 446	15 294	1.34	3 476	4 945	1.42
1921-22	2 930	3 794	1.29	22 113	28 066	1.27	11 325	15 599	1.38	4 182	5 212	1.25
1922-23	2 309	3 455	1.50	23 801	30 450	1.28	10 216	15 394	1.51	3 532	4 377	1.24
1923-24	1 712	2 151	1.26	20 825	24 723	1.19	5 869	8 260	1.41	2 927	4 346	1.48
1924-25	1 218	1 153	0.95	18 686	19 381	1.04	5 242	6 254	1.19	3 112	3 362	1.08
1925-26	2 114	2 059	0.97	14 869	15 191	1.02	7 726	10 692	1.38	3 324	2 891	0.87
1926-27	2 293	3 405	1.48	19 571	24 673	1.26	9 386	14 513	1.55	3 043	4 055	1.33
1927-28	2 064	3 214	1.56	17 381	25 452	1.46	8 531	20 896	2.45	3 672	5 631	1.53
1928-29	1 867	2 252	1.21	15 217	18 389	1.21	9 134	12 306	1.35	3 960	4 624	1.17
1929-30	2 806	3 795	1.35	15 807	21 365	1.35	6 801	10 158	1.49	4 097	6 031	1.47
1930-31	2 506	3 832	1.53	14 536	19 141	1.32	7 732	10 581	1.37	2 859	4 060	1.42
1931-32	3 390	2 721	0.80	7 451	6 488	0.87	4 744	4 944	1.04	2 439	2 079	0.85
1932-33	3 478	4 808	1.38	12 404	15 059	1.21	8 492	11 704	1.38	3 687	5 688	1.54
1933-34	3 173	3 915	1.23	12 626	15 532	1.23	9 752	15 153	1.55	5 663	6 592	1.16
1934-35	2 339	3 989	1.71	14 816	19 168	1.29	6 740	8 311	1.23	5 283	4 722	0.89
1935-36	2 115	2 107	1.00	9 683	10 123	1.05	4 210	5 027	1.19	4 116	3 430	0.83
1936-37	2 811	5 470	1.95	8 884	13 659	1.54	8 627	15 430	1.79	2 613	3 912	1.50
1937-38	3 762	6 958	1.85	13 128	18 767	1.43	8 531	14 216	1.67	1 882	2 707	1.44
1938-39	3 518	4 731	1.34	10 049	11 727	1.17	3 986	5 548	1.39	1 787	2 050	1.15
1939-40	3 125	4 446	1.42	9 352	9 626	1.03	3 033	2 911	0.96	2 113	3 407	1.61
1940-41	2 286	3 349	1.47	7 099	7 569	1.07	3 253	3 794	1.17	3 830	5 237	1.37
1941-42	2 153	2 672	1.24	11 043	15 248	1.38	2 596	3 924	1.51	7 485	8 452	1.13
1942-43	1 104	1 428	1.29	5 325	5 310	1.00	1 671	1 982	1.19	10 989	10 961	1.00
1943-44	1 391	2 150	1.55	3 943	5 438	1.38	1 958	3 301	1.69	15 176	15 785	1.04
1944-45	2 189	3 616	1.65	5 977	7 630	1.28	1 551	2 504	1.61	8 828	13 014	1.47
1945-46	2 730	2 803	1.03	5 656	5 120	0.91	2 016	1 801	0.89	9 420	7 922	0.84
1946-47	2 532	3 538	1.40	9 181	10 825	1.18	3 051	3 763	1.23	4 773	6 364	1.33
1947-48	3 298	4 961	1.50	6 910	6 548	0.95	3 147	3 195	1.02	2 783	3 938	1.42
1948-49	2 966	4 728	1.59	4 734	4 756	1.00	2 779	4 211	1.52	2 625	3 999	1.52
1949-50	1 759	2 975	1.69	9 232	10 499	1.14	2 215	3 440	1.55	3 101	3 955	1.28
1950-51	1 320	2 061	1.56	9 486	7 802	0.82	2 152	2 564	1.19	3 395	4 630	1.36
1951-52	1 716	3 400	1.98	10 740	10 803	1.01	1 458	2 541	1.74	3 078	5 338	1.73
1952-53	3 253	4 930	1.52	8 114	5 197	0.64	2 707	4 227	1.56	1 411	1 903	1.35
1953-54	3 819	6 738	1.76	8 141	8 381	1.03	3 921	7 116	1.81	2 159	3 096	1.43
1954-55	2 936	4 541	1.55	9 154	8 212	0.90	2 955	4 286	1.45	2 292	3 093	1.35
1955-56	2 558	4 339	1.70	11 604	9 964	0.86	2 519	3 478	1.38	2 334	3 690	1.58
1956-57	2 865	5 341	1.86	6 701	4 594	0.69	1 578	2 393	1.52	3 349	5 088	1.52
1957-58	3 393	6 140	1.81	8 381	8 762	1.05	2 381	4 148	1.74	2 923	3 854	1.32
1958-59	3 777	6 696	1.77	8 984	8 921	0.99	2 605	4 423	1.70	1 002	1 302	1.30
1959-60	5 016	9 511	1.90	8 910	9 305	1.04	3 344	4 912	1.47	1 285	2 148	1.67
1960-61	6 204	7 821	1.26	9 449	7 114	0.75	2 797	4 003	1.43	1 332	1 198	0.90
1961-62	7 579	13 794	1.82	10 908	10 676	0.98	6 300	9 327	1.48	1 566	2 814	1.80
1962-63	7 993	14 340	1.79	12 587	15 046	1.20	6 208	11 322	1.82	2 299	3 409	1.48
1963-64	5 581	9 414	1.69	12 280	15 339	1.25	7 107	13 047	1.84	2 087	2 693	1.29
1964-65	6 264	12 031	1.92	11 366	9 463	0.83	6 801	9 842	1.45	1 603	2 752	1.72
1965-66	8 056	15 541	1.93	11 449	12 304	1.07	5 709	9 955	1.74	2 223	2 779	1.25
1966-67	8 521	17 540	2.06	14 532	17 236	1.19	5 159	10 412	2.02	1 769	3 039	1.72
1967-68	9 733	20 096	2.06	14 314	18 430	1.29	4 864	8 548	1.76	1 725	2 540	1.47
1968-69	10 608	20 092	1.89	12 721	10 598	0.83	7 039	11 088	1.58	1 358	2 160	1.59
1969-70	12 016	24 896	2.07	8 971	8 272	0.92	5 962	9 531	1.60	1 577	3 224	2.04
1970-71	12 884	29 825	2.31	9 444	8 839	0.94	4 479	7 638	1.71	2 023	4 608	2.28
1971-72	12 576	27 753	2.21	6 432	7 065	1.10	4 570	8 299	1.82	1 025	1 650	1.61
1972-73	12 802	18 711	1.46	6 477	7 144	1.10	4 251	7 701	1.81	504	387	0.77
1973-74	11 121	23 790	2.13	9 173	8 247	0.89	2 521	3 510	1.39	587	1 027	1.74
1974-75	12 020	27 266	2.27	6 069	5 496	0.90	1 535	2 282	1.48	969	2 171	2.24
1975-76	11 475	18 389	1.60	3 924	3 497	0.89	1 644	1 728	1.05	209	261	1.25
1976-77	11 644	24 571	2.11	6 387	8 801	1.38	1 980	3 929	1.98	81	139	1.72
1977-78	11 444	19 403	1.70	4 616	4 279	0.93	1 257	1 545	1.23	326	417	1.28
1978-79	11 938	26 971	2.26	8 564	11 826	1.38	1 366	2 867	2.10	466	928	1.99
1979-80	10 558	17 304	1.60	7 489	7 937	1.10	1 972	3 727	1.90	548	684	1.20
1980-81	10 056	18 307	1.82	8 781	11 146	1.26	1 614	2 545	1.57	413	587	1.42

STATISTICAL SUMMARY

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(Chapter 12)

Area and Production of Principal Crops, Tasmania—continued

Year	Potatoes			Hops			Pasture Hay			Apples		
	Area	Total production	Yield per hectare	Bearing area	Total production	Yield per hectare	Area	Total production	Yield per hectare	Bearing area (a)	Total production	Yield per hectare
	ha	tonnes	tonnes	ha	tonnes	tonnes	ha	tonnes	tonnes	ha	tonnes	tonnes
1860-61	3 084	34 128	11.07	n.a.	n.a.	n.a.	12 880	63 318	4.92	n.a.	2 267	n.a.
1870-71	3 975	36 606	9.21	260	339	1.30	13 602	41 417	3.04		2 819	
1880-81	4 217	33 070	7.84	230	292	1.27	12 794	36 459	2.85		2 953	
1890-91	8 147	74 332	9.12	151	196	1.30	18 365	52 856	2.88		7 030	
1900-01	9 335	95 368	10.22	253	316	1.25	24 868	95 710	3.85		10 497	
1910-11	10 615	71 215	6.71	420	805	1.92	29 539	117 039	3.96		25 681	
1911-12	8 829	63 162	7.15	416	480	1.15	31 349	109 412	3.49		28 691	
1920-21	12 950	90 102	6.96	516	845	1.64	45 980	179 636	3.91	10 364	44 941	4.34
1921-22	14 890	109 351	7.34	572	995	1.74	37 006	139 190	3.76	10 829	56 982	5.26
1922-23	13 924	102 825	7.38	599	986	1.65	40 504	169 967	4.20	10 372	59 592	5.75
1923-24	14 989	101 540	6.77	604	1 040	1.72	39 329	146 614	3.73	10 393	36 006	3.46
1924-25	14 638	84 715	5.88	605	1 009	1.67	35 590	123 054	3.46	10 383	42 103	4.05
1925-26	13 431	68 422	5.09	483	791	1.64	37 472	116 764	3.12	10 311	78 719	7.63
1926-27	13 753	115 931	8.43	528	974	1.84	39 776	153 627	3.86	10 120	55 248	5.46
1927-28	17 951	141 065	7.86	514	1 119	2.18	34 710	126 929	3.66	10 237	89 025	8.70
1928-29	15 094	76 429	5.06	480	875	1.82	32 452	121 344	3.74	10 219	47 628	4.66
1929-30	13 647	92 600	6.79	472	872	1.85	32 437	121 723	3.75	9 562	75 221	7.87
1930-31	15 066	96 818	6.43	393	760	1.93	33 697	131 027	3.89	9 672	72 394	7.48
1931-32	14 727	96 920	6.58	345	725	2.10	34 118	94 081	2.76	9 377	111 334	11.87
1932-33	14 475	99 809	6.90	321	628	1.96	37 501	143 403	4.20	9 402	84 015	8.94
1933-34	14 778	82 578	5.59	328	730	2.22	31 414	111 153	3.54	9 436	94 360	10.00
1934-35	14 714	71 142	4.83	334	831	2.49	38 857	152 492	3.92	9 485	74 947	7.90
1935-36	14 050	87 183	6.21	352	981	2.79	30 247	98 443	2.53	9 296	75 251	8.09
1936-37	14 960	140 781	9.41	365	950	2.60	36 177	139 068	3.84	8 745	87 844	10.05
1937-38	13 139	101 574	7.73	357	958	2.68	29 561	114 809	3.88	8 881	91 292	10.28
1938-39	10 803	90 764	8.40	373	1 041	2.79	32 358	111 291	3.44	8 684	109 048	12.56
1939-40	12 323	116 245	9.43	368	808	2.20	38 957	143 674	3.69	8 850	98 075	11.08
1940-41	15 121	115 871	7.66	369	1 351	3.66	30 789	96 708	3.14	8 808	113 277	12.86
1941-42	12 400	111 613	9.00	427	1 280	3.00	37 488	149 997	4.00	8 970	121 107	13.50
1942-43	16 359	138 112	8.44	448	1 183	2.64	33 209	111 721	3.36	8 889	109 410	12.31
1943-44	24 484	221 296	9.04	435	1 267	2.91	40 178	156 303	3.89	8 896	152 846	17.18
1944-45	32 817	350 773	4.55	441	1 102	2.50	38 855	148 253	3.82	8 723	125 165	14.35
1945-46	22 762	239 930	10.54	445	904	2.03	40 371	118 958	2.95	8 702	162 353	18.66
1946-47	17 493	173 359	9.91	490	1 005	2.05	42 093	172 103	4.09	8 544	80 548	9.43
1947-48	16 342	145 037	8.88	506	1 113	2.20	34 137	139 857	4.10	8 239	150 389	18.25
1948-49	13 079	139 915	10.24	508	694	1.37	36 656	153 118	4.18	7 826	48 828	6.24
1949-50	13 804	123 958	8.98	518	977	1.89	36 962	158 151	4.28	7 661	91 330	11.92
1950-51	12 780	125 990	9.86	518	1 125	2.17	39 007	163 301	4.19	7 378	92 359	12.52
1951-52	12 753	153 424	12.03	531	778	1.47	39 563	175 051	4.42	7 273	93 921	12.91
1952-53	14 304	116 338	8.13	524	1 367	2.61	44 534	195 289	4.39	7 200	71 575	9.94
1953-54	13 971	146 616	10.49	518	973	1.88	49 877	245 459	4.92	7 184	101 047	14.07
1954-55	10 606	102 621	9.68	539	1 353	2.51	39 051	160 495	4.11	6 890	95 426	13.85
1955-56	8 434	79 181	9.39	531	1 437	2.71	55 505	265 619	4.79	6 950	112 896	16.24
1956-57	7 740	91 140	11.78	569	974	1.71	49 837	242 209	4.86	6 754	64 792	9.59
1957-58	8 780	103 129	11.75	571	1 302	2.28	44 581	208 062	4.67	6 804	126 403	18.58
1958-59	6 550	87 279	13.32	579	1 535	2.65	62 250	306 923	4.93	6 651	94 931	14.27
1959-60	6 283	99 573	15.85	581	1 270	2.19	51 211	224 778	4.39	6 509	104 266	16.02
1960-61	4 401	39 677	9.02	569	1 279	2.25	69 206	331 206	4.79	6 404	106 571	16.64
1961-62	4 504	72 709	16.14	571	1 287	2.25	63 632	289 971	4.56	6 239	149 436	23.95
1962-63	5 600	83 870	14.98	588	1 298	2.21	66 952	318 028	4.75	6 268	119 297	19.03
1963-64	4 373	66 470	15.20	592	717	1.21	60 557	253 175	4.18	6 291	162 791	25.88
1964-65	3 801	57 978	15.25	597	947	1.59	72 947	370 204	5.07	6 286	118 250	18.81
1965-66	4 853	77 626	16.00	603	1 392	2.31	59 824	261 366	4.37	6 254	159 343	25.48
1966-67	4 159	74 476	17.91	594	948	1.60	82 225	443 919	5.40	6 165	120 040	19.47
1967-68	4 435	80 327	18.11	608	1 363	2.24	72 373	314 060	4.34	6 048	151 322	25.02
1968-69	4 638	73 278	15.80	616	1 582	2.57	85 212	502 159	5.89	5 863	135 986	23.19
1969-70	3 790	67 995	17.94	565	1 268	2.24	69 526	367 340	5.28	5 804	140 977	24.29
1970-71	3 640	72 591	19.94	452	1 077	2.38	85 656	447 766	5.23	5 715	140 463	24.58
1971-72	3 593	70 370	19.59	539	1 159	2.15	81 176	449 936	5.54	5 218	111 887	21.44
1972-73	3 330	78 286	23.51	616	1 450	2.35	53 937	215 580	4.00	4 980	133 449	26.80
1973-74	3 127	62 866	20.10	703	1 949	2.77	88 884	448 355	5.04	4 148	113 012	27.24
1974-75	4 143	95 610	23.07	662	1 439	2.17	78 557	375 969	4.79	3 335	95 247	28.56
1975-76	3 354	95 614	28.51	513	1 129	2.20	70 262	322 235	4.59	2 947	72 529	24.61
1976-77	3 705	112 269	30.30	587	1 330	2.27	69 730	334 961	4.80	2 741	71 781	26.19
1977-78	3 592	107 240	29.86	567	1 201	2.12	46 480	166 495	3.58	2 601	63 444	24.39
1978-79	3 646	124 385	34.12	578	1 457	2.52	65 835	295 464	4.49	2 693	85 230	31.65
1979-80	4 115	136 197	33.10	620	1 183	1.90	57 689	243 527	4.20	2 661	74 434	28.00
1980-81	4 335	155 965	35.97	672	1 558	2.32	61 555	241 817	3.93	2 758(a)	76 033	27.57

(a) From 1980-81: total area.

(Chapter 12)

Livestock Numbers: Production of Wool; Lambing, Tasmania

Year	Livestock (a)				Production of Wool (a)			Lambing	
	Horses	Cattle	Sheep	Pigs	Number of sheep and lambs shorn	Average yield per sheep and lamb shorn (including crutchings)	Production of wool (including dead, fell-mongered & exported on skins)	Ewes mated	Lambs marked
	'000	'000	'000	'000	'000	kg	'000 kg	'000	'000
1860	21	83	1 701	31	n.a.	n.a.	2 058	n.a.	n.a.
1870	23	101	1 350	49			1 881		
1880	25	127	1 794	48			4 094		
1890	31	162	1 619	82			4 075		
1900	32	166	1 684	68			3 064		
1910	41	202	1 788	64			6 050		
1920-21	39	208	1 571	38	1 551	2.94	5 218	416	299
1921-22	31	217	1 551	50	1 428	3.25	5 278	506	378
1922-23	37	218	1 558	46	1 503	3.26	5 542	524	411
1923-24	38	220	1 558	47	1 507	3.13	5 312	517	392
1924-25	37	226	1 614	47	1 630	3.16	5 662	557	423
1925-26	38	212	1 619	41	1 639	3.18	5 699	554	390
1926-27	37	213	1 808	39	1 738	2.93	5 594	563	433
1927-28	36	211	1 905	42	1 859	2.99	6 021	629	488
1928-29	35	209	2 601	48	1 902	3.22	6 759	640	502
1929-30	34	215	2 091	53	1 983	3.14	6 804	679	534
1930-31	33	230	2 120	55	1 961	3.11	6 713	695	547
1931-32	31	232	2 012	41	1 913	3.14	6 668	647	478
1932-33	30	251	2 041	41	1 940	3.16	6 895	679	526
1933-34	30	262	2 035	38	1 991	2.91	6 441	686	517
1934-35	31	262	2 038	40	1 976	2.90	6 366	672	497
1935-36	31	270	2 140	45	2 010	3.37	7 394	735	586
1936-37	31	262	2 234	40	1 106	2.72	6 381	791	594
1937-38	32	255	2 521	43	2 460	2.60	7 076	873	722
1938-39	30	262	2 626	45	2 432	3.03	7 946	940	737
1939-40	30	252	2 677	45	2 509	3.08	8 316	940	756
1940-41	29	259	2 682	47	2 517	2.78	7 746	988	764
1941-42	29	253	2 398	45	2 416	3.04	7 704	844	669
1942-43	27	245	2 227	49	2 293	2.98	7 827	785	655
1943-44	26	230	2 188	46	2 260	2.93	8 130	811	669
1944-45	26	225	2 156	47	2 235	2.79	7 404	756	629
1945-46	25	216	1 926	47	2 015	2.73	7 411	701	509
1946-47	24	220	1 933	47	2 005	3.04	7 549	577	440
1947-48	23	244	2 087	45	2 085	3.18	6 952	779	656
1948-49	22	266	2 160	37	2 198	3.09	7 641	803	662
1949-50	21	275	2 170	36	2 255	2.97	7 692	800	652
1950-51	20	272	2 182	45	2 245	2.99	7 824	774	637
1951-52	19	226	2 338	47	2 379	3.42	9 305	839	726
1952-53	18	275	2 422	39	2 502	3.19	8 984	894	768
1953-54	17	295	2 465	46	2 553	3.16	9 124	916	788
1954-55	16	319	2 595	58	2 715	3.53	10 794	968	884
1955-56	15	332	2 673	49	2 733	3.45	10 624	979	877
1956-57	14	354	2 943	52	3 082	3.78	13 009	1 150	1 056
1957-58	13	371	3 298	63	3 388	3.50	13 234	1 266	1 199
1958-59	12	374	3 536	69	3 673	3.57	14 803	1 381	1 269
1959-60	11	375	3 494	67	3 834	3.44	15 241	1 461	1 354
1960-61	9	394	3 439	71	3 678	3.44	14 456	1 378	1 267
1961-62	9	425	3 532	76	3 830	3.56	15 635	1 440	1 368
1962-63	8	444	3 570	70	3 783	3.64	15 677	1 419	1 310
1963-64	8	450	3 600	83	3 868	3.47	15 425	1 458	1 353
1964-65	7	451	3 792	92	3 978	4.06	17 994	1 478	1 374
1965-66	n.a.	492	4 127	96	4 318	3.88	18 986	1 651	1 594
1966-67	7	522	4 321	86	4 517	3.88	19 574	1 688	1 574
1967-68	n.a.	564	4 428	87	4 572	3.34	17 376	1 779	1 522
1968-69		586	4 395	95	4 632	4.09	21 299	1 736	1 561
1969-70		646	4 560	111	4 792	4.05	21 861	1 831	1 715

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(Chapter 12)

Livestock Numbers: Production of Wool; Lambing, Tasmania—continued

Year	Livestock (a)				Production of Wool (a)			Lambing	
	Horses	Cattle	Sheep	Pigs	Number of sheep and lambs shorn	Average yield per sheep and lamb shorn (including crutchings)	Production of wool (including dead, fell-mongered & exported on skins)	Ewes mated	Lambs marked
	'000	'000	'000	'000	'000	kg	'000 kg	'000	'000
1970-71		733	4 517	113	4 806	3.99	21 671	1 889	1 705
1971-72		829	4 237	104	4 607	4.03	21 063	1 805	1 617
1972-73		900	3 824	85	4 251	3.76	18 154	1 604	1 369
1973-74		884	3 964	68	4 101	3.90	17 549	1 535	1 361
1974-75		921	4 136	64	4 153	4.12	18 888	1 644	1 466
1975-76	n.a.	909	4 249	70	4 352	4.13	19 951	1 677	1 515
1976-77		819	4 015	65	4 229	3.82	18 109	1 640	1 378
1977-78		733	3 969	64	4 242	4.00	18 294	1 672	1 529
1978-79		657	4 157	61	4 319	4.04	19 079	1 712	1 582
1979-80		649	4 245	63	4 550	4.00	20 003	1 861	1 706
1980-81		659	4 381	54	4 627	3.91	20 049	1 892	1 674

(a) Up to 1925-26 numbers recorded were at varying dates in the years shown; from 1926 to 1940 at 31 December; from 1941-42 at 31 March.

(Chapter 12)

Livestock Slaughtered (a) for Human Consumption, Tasmania

Year	Cattle and Calves				Sheep and Lambs			Pigs
	Bulls, bullocks & steers	Cows and heifers	Calves	Total	Sheep	Lambs	Total	
1924-25	21 068	12 544	2 542	36 154	212 983	63 134	276 117	55 229
1929-30	20 430	13 034	1 814	35 278	228 090	113 437	341 527	64 287
1939-40	32 685	12 110	3 633	48 428	248 372	212 585	460 957	73 398
1944-45	27 290	14 356	4 701	46 527	323 797	185 616	509 413	58 068
1949-50	29 331	23 736	4 580	57 647	245 691	262 360	508 051	50 861
1950-51	32 199	28 921	8 637	69 757	234 084	250 535	484 619	57 787
1951-52	33 352	29 506	8 729	71 587	226 377	256 116	482 493	65 893
1952-53	32 913	25 270	12 297	70 480	269 776	306 739	576 515	65 520
1953-54	22 630	25 188	13 955	61 773	286 665	307 326	593 991	59 473
1954-55	26 741	32 871	15 333	74 945	287 103	356 103	643 206	79 305
1955-56	32 259	36 370	19 786	88 415	256 188	388 802	644 990	87 609
1956-57	38 494	38 341	25 195	102 030	280 082	403 859	683 941	82 032
1957-58	42 028	45 294	30 534	117 856	283 242	451 214	734 456	90 593
1958-59	42 525	49 046	35 923	127 494	362 988	546 196	909 184	107 489
1959-60	47 147	56 885	40 548	144 580	504 961	661 470	1 166 431	114 538
1960-61	35 515	43 309	36 170	114 994	474 690	601 042	1 075 732	111 457
1961-62	42 614	48 638	44 230	135 482	510 626	649 306	1 159 932	120 450
1962-63	49 510	62 317	46 149	157 976	465 996	628 757	1 094 753	115 424
1963-64	51 518	70 885	53 823	176 226	544 945	582 113	1 127 058	123 502
1964-65	52 946	70 510	50 610	174 066	424 810	562 135	986 945	134 526
1965-66	47 066	60 664	46 514	154 244	566 671	597 197	1 163 868	146 266
1966-67	52 475	67 206	50 789	170 470	552 235	606 859	1 159 094	148 913
1967-68	57 871	66 016	47 872	171 759	600 124	524 850	1 124 974	142 986
1968-69	68 376	64 160	45 236	177 772	567 501	673 446	1 240 947	138 954
1969-70	78 618	66 473	32 765	177 856	608 311	688 664	1 296 975	160 112
1970-71	78 926	61 139	22 011	162 076	713 204	680 679	1 393 883	170 579
1971-72	96 255	69 186	19 346	184 787	812 960	662 193	1 475 153	165 007
1972-73	124 672	110 177	25 933	260 782	636 501	641 718	1 278 219	152 004
1973-74	126 251	103 552	29 554	259 357	335 566	489 697	825 263	115 625
1974-75	149 285	75 382	37 450	262 117	402 813	577 119	979 932	101 359
1975-76	164 059	119 418	64 536	348 013	454 912	613 611	1 068 522	94 090
1976-77	144 910	139 910	72 888	357 708	469 125	523 522	992 647	99 603
1977-78	160 977	132 802	68 686	362 465	386 772	650 067	1 036 839	92 474
1978-79	123 590	103 152	54 466	281 209	345 388	502 890	848 278	90 520
1979-80	95 600	83 000	39 500	218 100	316 900	613 200	930 100	88 700
1980-81	95 900	86 100	42 200	224 200	403 300	646 900	1 050 200	88 600

(a) Including livestock slaughtered on farms.

(Chapter 12)

Value of Agricultural Commodities Produced, Tasmania
(\$'000)

Year	Crops (a)		Livestock slaughtering and other disposals		Livestock products		Total agriculture	
	Gross	Local	Gross	Local	Gross	Local	Gross	Local
1970-71	40 169	29 174	28 142	25 910	41 903	40 194	110 214	95 277
1971-72	33 748	24 043	31 468	28 956	46 980	45 133	112 196	98 132
1972-73	40 041	28 261	43 562	40 363	64 750	61 652	148 353	130 276
1973-74	46 649	36 969	58 019	54 000	59 995	57 262	164 663	148 231
1974-75	49 409	39 670	31 707	29 083	56 520	53 124	137 636	121 876
1975-76	r 43 009	r 35 230	34 052	31 042	60 672	56 991	r 137 733	r 123 263
1976-77	r 55 706	r 48 703	46 103	42 199	72 075	68 176	r 173 884	r 159 078
1977-78	r 53 961	r 47 847	54 776	47 855	76 108	72 155	r 184 845	r 167 857
1978-79	76 936	68 760	91 737	80 197	r 86 744	r 82 657	r 255 417	r 231 614
1979-80	r 70 397	r 61 656	100 332	87 372	r 93 674	r 89 001	r 264 403	r 238 029
1980-81	80 324	71 098	94 080	82 395	100 219	95 104	274 623	248 597

(a) Excludes crops and pasture harvested for green feed or silage.

(Chapter 12)

Production of Meat, Tasmania
(Tonnes: Carcass Weight)

Year	Beef and Veal			Mutton and lamb			Pigmeat (a)	Total
	Beef	Veal	Total	Mutton	Lamb	Total		
1924-25	8 233		8 233	4 154	888	5 042	2 561	15 836
1929-30	8 153		8 153	4 448	1 595	6 043	2 848	17 044
1939-40	10 626	165	10 791	4 845	2 989	7 834	3 560	22 185
1944-45	9 117	212	9 329	6 400	2 948	9 348	3 104	21 781
1949-50	12 299	169	12 468	4 896	4 173	9 069	2 597	24 134
1955-56	15 133	530	15 663	5 260	6 707	11 967	3 693	31 323
1956-57	17 592	612	18 204	5 812	6 998	12 810	3 402	34 416
1957-58	19 635	726	20 361	5 694	7 739	13 433	4 284	38 078
1958-59	19 893	839	20 732	7 444	9 223	16 667	4 990	42 389
1959-60	22 610	906	23 516	10 267	10 846	21 113	5 438	50 067
1960-61	16 388	777	17 165	9 513	9 715	19 228	5 138	41 531
1961-62	19 076	910	19 989	10 228	10 326	20 554	5 515	46 058
1962-63	23 076	999	24 075	9 614	10 083	19 697	5 549	49 321
1963-64	24 988	1 337	26 325	11 101	9 300	20 401	6 022	52 748
1964-65	25 741	951	26 692	9 225	9 189	18 414	6 691	51 797
1965-66	22 429	951	23 380	11 697	9 739	21 436	7 136	51 952
1966-67	24 124	967	25 091	11 412	9 825	21 237	7 279	53 607
1967-68	24 509	977	25 486	11 666	8 497	20 163	7 001	52 650
1968-69	27 583	802	28 385	11 701	11 112	22 813	7 137	58 335
1969-70	30 909	599	31 509	12 767	11 282	24 049	8 007	63 564
1970-71	29 481	398	29 879	14 755	11 318	26 073	8 530	64 482
1971-72	34 422	374	34 796	16 314	10 875	27 189	8 266	70 251
1972-73	46 946	525	47 471	12 201	10 327	22 528	7 389	77 388
1973-74	45 669	613	46 282	6 672	8 096	14 768	5 477	66 527
1974-75	47 592	721	48 313	7 984	9 508	17 492	4 872	70 677
1975-76	57 924	1 242	59 166	8 997	9 849	18 846	4 516	82 529
1976-77	55 790	1 613	57 403	8 494	8 189	16 683	4 946	79 032
1977-78	59 779	1 556	61 335	7 035	9 849	16 884	4 785	83 004
1978-79	46 269	1 152	47 421	6 833	7 883	14 716	4 834	66 971
1979-80	36 561	835	37 396	5 656	9 017	14 673	4 862	56 931
1980-81	36 812	924	37 736	7 420	9 976	17 396	4 767	59 899

(a) Includes pork for manufacture into bacon and ham.

STATISTICAL SUMMARY

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(Chapter 12)

Weighted Average Prices Paid To Farmers Per Unit of Selected Farm Products, Tasmania (\$ per tonne)

Year	Cereal for grain		Hops	Orchard fruit		Small fruit		Vegetables		Wool greasy
	Wheat	Barley		Apples	Pears	Currants	Raspberries	Potatoes	Peas	
1929-30	18	15	198	17	23	40	40	13	n.a.	220
1934-35	12	13	309	28	28	40	40	17	n.a.	200
1939-40	12	17	331	23	25	70	70	18	n.a.	260
1944-45	18	23	397	20	20	90	70	25	n.a.	350
1949-50	50	32	772	64	73	130	130	30	n.a.	1 320
1954-55	50	74	1 213	101	114	180	180	79	30	1 410
1959-60	51	59	1 389	99	100	220	200	39	28	1 150
1960-61	51	63	1 367	102	126	260	180	89	31	1 060
1961-62	59	64	1 433	104	87	260	220	52	26	1 080
1962-63	54	61	1 433	112	122	240	220	25	60	1 210
1963-64	53	63	1 433	107	111	260	220	64	115	1 480
1964-65	49	61	1 499	113	129	220	220	116	103	1 080
1965-66	51	58	1 565	100	68	200	220	37	96	1 230
1966-67	53	63	1 653	124	119	240	240	54	108	1 120
1967-68	54	66	1 698	110	102	290	310	48	117	960
1968-69	42	57	1 698	107	124	290	330	29	111	1 050
1969-70	53	52	1 698	110	136	310	330	46	99	880
1970-71	48	51	1 698	103	134	330	350	42	119	740
1971-72	54	47	1 874	103	117	330	350	37	115	1 900
1972-73	52	52	1 961	121	174	350	350	57	106	2 290
1973-74	104	77	1 649	121	117	390	410	87	116	1 920
1974-75	104	92	860	149	181	470	530	59	131	1 370
1975-76	97	99	1 395	173	171	500	500	77	147	1 570
1976-77	82	111	1 695	165	195	550	580	83	156	2 100
1977-78	86	121	1 957	202	261	700	740	83	158	2 090
1978-79	109	122	2 202	195	248	720	870	102	158	2 340
1979-80	128	124	2 553	223	284	780	950	104	159	2 700
1980-81	139	150	3 002	220	352	800	1 080	110	177	2 770

(Chapter 13)

Assayed Contents of Metallic Minerals Produced: Coal Production, Tasmania

Year	Cadmium		Copper		Gold		Iron		Lead		Manganese	
	tonnes	tonnes	tonnes	tonnes	kg	kg	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes
1953	73	9 045	528	—	—	—	—	10 199	—	—	—	—
1955	50	8 529	525	—	—	—	—	11 448	—	—	—	—
1960	57	11 867	747	—	—	—	—	13 249	—	—	175	—
1961	63	12 947	836	—	—	—	—	12 450	—	—	188	—
1962	73	14 748	999	—	—	—	—	14 991	—	—	268	—
1963	75	17 075	1 133	—	—	—	—	15 222	—	—	262	—
1964	78	15 118	1 069	—	—	—	—	15 594	—	—	247	—
1965	71	15 411	1 023	—	—	—	—	14 466	—	—	237	—
1966	76	17 278	1 135	—	—	—	—	15 828	—	—	258	—
1967	74	17 540	1 167	—	—	—	—	15 375	—	—	247	—
1968	75	16 867	1 135	502 462	—	—	—	15 152	—	—	250	—
1969	77	18 983	1 252	1 388 328	—	—	—	15 145	—	—	258	—
1970	70	23 934	1 335	1 346 065	—	—	—	13 934	—	—	209	—
1971	84	25 525	1 793	1 497 486	—	—	—	16 617	—	—	509	—
1972	138	28 298	2 021	1 623 450	—	—	—	26 806	—	—	2 205	—
1973	178	25 821	1 511	1 678 146	—	—	—	20 236	—	—	2 399	—
1974	126	29 086	1 586	1 514 373	—	—	—	19 017	—	—	385	—
1975	167	26 460	1 668	1 431 041	—	—	—	19 552	—	—	265	—
1976	157	25 342	1 495	1 542 306	—	—	—	18 034	—	—	232	—
1977	199	22 002	1 891	1 413 476	—	—	—	22 800	—	—	427	—
1978	188	23 908	1 912	1 446 024	—	—	—	22 754	—	—	341	—
1979	188	22 591	1 747	1 528 225	—	—	—	22 160	—	—	269	—
1980	119	23 013	1 311	1 472 923	—	—	—	15 511	—	—	198	—
1981	181	22 402	1 950	1 543 938	—	—	—	25 517	—	—	249	—

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Assayed Contents of Metallic Minerals Produced: Coal Production, Tasmania—continued

Year	Silver	Sulphur	Tin	Tungstic oxide (WO ₃)	Zinc	Coal production
	kg	tonnes	tonnes	tonnes	tonnes	tonnes
1953	38 599	42 516	801	1 069	30 247	237 370
1955	36 267	38 857	867	1 358	28 396	304 023
1960	43 483	55 636	898	1 115	35 069	302 448
1961	45 162	53 128	893	1 543	40 735	259 934
1962	52 876	37 145	1 075	1 052	48 687	276 713
1963	52 969	42 997	1 021	975	49 267	210 243
1964	55 364	57 004	1 006	1 009	50 960	153 587
1965	52 192	54 840	1 043	1 196	47 053	104 101
1966	57 013	63 804	1 047	1 327	50 651	83 990
1967	55 955	62 470	1 553	1 202	49 641	77 769
1968	54 400	53 926	3 154	1 425	48 919	92 389
1969	54 213	47 449	4 853	1 524	50 898	117 794
1970	53 343	84 502	5 018	1 434	46 922	113 529
1971	63 389	109 046	6 166	1 742	52 749	123 922
1972	99 251	164 884	6 825	1 918	85 580	132 242
1973	76 903	160 971	5 674	1 502	63 792	114 588
1974	80 180	153 767	5 950	1 304	65 311	127 460
1975	76 401	152 884	5 489	1 712	67 476	161 922
1976	71 310	154 008	6 853	2 202	62 004	189 489
1977	84 772	163 486	6 634	2 534	78 405	198 966
1978	86 193	148 966	7 270	2 630	77 388	223 957
1979	76 662	84 422	6 892	2 522	75 279	237 380
1980	57 159	41 227	6 234	2 914	54 273	234 175
1981	78 177	53 683	7 057	2 983	74 413	345 951

(Chapter 13)

Fisheries, Tasmania

Year	Boats engaged (a)	Persons engaged (a)	Production (b)							Gross value of production (c)
			Fish				Southern rock lobster	Scallops	Abalone	
			Snoek (barracouta)	Salmon	Shark	Other				
	no.	no.	'000 kg	'000 kg	'000 kg	'000 kg	'000 kg	'000 kg	'000 kg	\$'000
1951-52	n.a.	n.a.	1 580	50	392	319	852	738	—	882
1952-53			1 819	61	1 010	231	1 222	1 465	—	1 210
1953-54			362	173	506	238	1 006	1 714	—	864
1954-55			673	195	301	243	1 313	2 452	—	1 112
1955-56			576	116	291	170	1 108	2 625	—	1 012
1956-57	472	958	1 100	33	235	180	954	2 664	—	1 216
1957-58	458	907	414	60	384	128	1 088	1 888	—	1 016
1958-59	438	923	644	93	360	171	1 250	2 148	—	1 328
1959-60	469	968	711	147	413	167	1 329	2 043	—	1 612
1960-61	478	1 072	373	545	439	166	1 436	2 402	—	1 920
1961-62	514	1 122	935	1 325	451	128	1 554	2 164	—	2 294
1962-63	511	1 208	512	528	377	155	1 501	2 663	—	2 254
1963-64	507	1 191	639	385	370	160	1 620	1 932	49	2 203
1964-65	503	957	915	227	299	209	1 513	1 323	225	2 686
1965-66	596	1 154	1 362	196	493	212	1 787	394	726	3 300
1966-67	618	1 200	1 037	427	455	270	1 946	341	1 999	3 653
1967-68	585	1 118	1 624	343	685	300	1 752	225	2 786	4 473
1968-69	566	1 160	1 401	174	947	248	1 700	125	2 108	4 864
1969-70	553	1 123	1 578	67	801	219	1 390	50	2 608	4 043
1970-71	529	1 090	610	201	793	335	1 607	—	3 488	5 984
1971-72	588	1 207	581	507	859	433	1 469	52	2 971	6 808
1972-73	589	1 235	915	461	497	392	1 583	515	2 172	5 739
1973-74	594	1 268	598	371	1 187	7 728	1 514	1 158	2 060	7 014
1974-75	616	1 343	760	631	651	828	1 525	1 261	2 108	6 928
1975-76	607	1 347	143	473	1 238	375	1 229	690	2 429	8 511
1976-77	640	1 439	37	573	1 130	413	1 117	498	2 368	11 662
1977-78	655	1 466	194	611	1 710	590	1 192	400	2 525	12 609
1978-79	727	1 620	38	451	1 490	626	1 305	1 077	3 100	14 636
1979-80	760	1 687	7	283	1 210	688	1 340	3 829	1 314	20 463
1980-81	781	1 678	2	200	1 288	1 037	1 553	3 359	3 743	26 514

(a) Year ended December of the first year named.

(b) Landed at Tasmanian ports; estimated live weight.

(c) Includes crabs, squid, oysters and seaweed.

(Chapter 14)

Principal Articles Produced in Factories, Tasmania

Year	Foodstuffs					Refined zinc
	Butter (a)	Cheese (factory and farm)	Bacon and ham (cured weight) (b)	Flour (incl. wheatmeal for baking)	Aerated waters	
	tonnes	tonnes	tonnes	tonnes	'000 litres	tonnes
1939-40	5 380	1 470	1 313	17 137	1 650	74 012
1944-45	4 157	1 200	1 209	20 442	2 855	80 612
1949-50	5 614	428	1 007	24 714	4 510	85 122
1959-60	12 079	372	1 162	28 007	8 356	119 785
1960-61	10 552	399	1 138	26 388	8 656	127 957
1961-62	12 376	641	1 149	26 356	8 828	131 140
1962-63	13 405	681	1 201	26 442	9 683	138 391
1963-64	13 984	1 358	1 185	24 868	9 938	140 835
1964-65	14 218	2 388	1 190	25 367	10 310	141 006
1965-66	14 229	2 989	1 079	25 022	11 111	146 221
1966-67	14 541	3 822	1 262	24 470	11 583	146 227
1967-68	13 999	4 724	1 302	23 957	12 029	131 872
1968-69	16 017	5 820	1 416	23 826	12 644	151 094
1969-70	16 343	5 407	1 403	21 947	13 354	170 931
1970-71	15 273	5 556	1 803	22 264	14 049	162 271
1971-72	15 318	5 923	1 984	22 488	14 402	175 798
1972-73	12 947	7 218	1 902	31 698	15 236	193 782
1973-74	12 398	8 475	1 931	34 643	15 751	182 749
1974-75	12 196	12 387	2 169	34 938	14 845	152 749
1975-76	10 762	13 332	2 356	30 691	16 219	137 637
1976-77	9 707	13 156	2 434	32 427	18 786	170 685
1977-78	7 910	13 903	2 505	32 780	20 082	161 173
1978-79	7 075	17 494	2 457	34 901	19 834	204 623
1979-80	5 461	15 431	2 094	37 269	18 361	191 683
1980-81	4 234	13 905	2 375	37 811	19 397	188 471
1981-82	n.a.	n.a.	2 634	35 068	19 108	193 714

Principal Articles Produced in Factories, Tasmania—continued

Year	Chemicals, fertilisers, etc.			Sawn, peeled and sliced timber (c)	Miscellaneous	
	Sulphuric acid	Super-phosphate	Sulphate of ammonia		Newsprint	Electricity (d)
	tonnes	tonnes	tonnes	'000 m ³	tonnes	m kWh
1939-40	14 552	33 337	—	189.7	—	612
1944-45	15 124	28 519	—	197.7	24 373	796
1949-50	42 747	69 943	—	298.2	30 961	1 062
1954-55	70 676	77 034	—	331.3	74 789	1 589
1959-60	129 077	104 260	58 525	400.4	89 931	2 532
1960-61	137 178	106 285	62 574	388.3	89 452	2 632
1961-62	138 636	121 143	62 319	351.6	91 199	2 733
1962-63	142 227	127 426	53 274	377.2	91 693	3 213
1963-64	161 381	134 233	43 506	403.2	93 516	3 409
1964-65	184 936	132 445	60 772	420.2	94 637	3 780
1965-66	198 551	162 441	65 135	421.2	94 707	3 896
1966-67	211 201	166 757	58 422	411.5	98 816	4 116
1967-68	185 303	145 968	13 086	413.5	94 135	3 773
1968-69	206 474	140 340	40 324	414.4	125 924	4 738
1969-70	266 449	133 245	40 563	413.7	173 314	5 140
1970-71	387 193	105 323	40 252	406.1	178 683	5 451
1971-72	558 658	104 763	41 358	412.8	181 477	5 778
1972-73	652 513	177 192	48 654	416.3	199 053	5 902
1973-74	570 156	180 458	33 191	414.3	200 852	6 010
1974-75	517 052	103 253	54 701	410.2	196 240	6 095
1975-76	466 817	57 896	23 040	373.5	206 228	6 008
1976-77	506 338	101 281	12 291	368.1	206 590	6 842
1977-78	522 154	97 012	5 292	338.5	207 621	7 179
1978-79	414 644	151 489	6 045	320.6	208 143	7 748
1979-80	302 550	132 783	1 213	355.2	221 460	7 903
1980-81	253 547	139 869	969	373.9	214 400	8 044
1981-82	335 507	126 416	—	327.2	219 429	8 122

(a) Includes butter equivalent of butter oil and from 1965-66 excludes farm production.

(b) Includes non-factory production. From July 1970 all weights are on a bone-in basis; earlier figures include an element of unconverted bone-out weights.

(c) Includes hardwood and softwood.

(d) Mainly output of Hydro-Electric Commission.

(NOTE: Details of production of a number of important articles cannot be published because of confidentiality.)

(Chapter 14)

Manufacturing, Tasmania

Year	Number of factories at end of year	Employment (a)			Salaries and wages paid (b) (\$'000)	Value of Materials used (\$'000)	Value of output (c) (\$'000)	Value of production (d) (\$'000)	Land and buildings (\$'000)	Plant and machinery (\$'000)
		Males	Females	Persons						
1910	635	8 277	1 703	9 980	n.a.	n.a.	n.a.	n.a.	2 044	2 092
1915	589	7 161	1 259	8 420	1 567	4 387	8 431	3 823	2 265	2 457
1920	616	8 746	1 479	10 225	2 960	8 469	14 304	5 525	1 963	3 863
1924-25	675	9 016	1 982	10 998	3 776	6 885	15 685	7 251	4 209	13 457
1929-30	845	8 547	2 273	10 820	4 056	8 025	17 121	7 124	5 994	13 894
1934-35	926	8 321	2 234	10 555	3 204	6 260	14 446	6 316	5 390	12 138
1939-40	980	11 754	2 916	14 670	5 372	10 821	25 987	12 506	7 551	13 576
1940-41	1 002	12 341	3 498	15 839	6 119	12 377	27 735	12 584	8 474	15 098
1941-42	994	13 389	4 167	17 556	7 442	14 922	32 622	14 429	8 769	15 226
1942-43	992	13 941	4 369	18 310	8 946	17 393	37 408	16 151	9 854	16 267
1943-44	994	14 697	5 094	19 791	10 387	19 144	41 696	18 091	10 586	16 129
1944-45	1 006	14 756	4 755	19 511	10 017	19 934	42 714	17 805	10 983	15 934
1945-46	1 082	15 105	4 130	19 235	10 013	20 616	44 239	18 391	10 609	16 461
1946-47	1 169	16 186	3 751	19 937	11 276	22 650	49 139	21 335	11 356	17 000
1947-48	1 225	17 208	3 965	21 173	13 731	27 311	57 569	24 489	12 543	19 832
1948-49	1 346	18 508	4 094	22 602	16 913	34 319	73 314	32 149	14 670	24 507
1949-50	1 456	19 302	4 204	23 506	19 293	43 468	90 160	38 671	17 299	27 456
1950-51	1 486	19 454	4 373	23 827	23 475	58 290	117 249	49 229	20 701	34 312
1951-52	1 512	19 934	4 093	24 027	29 407	71 804	143 853	59 588	24 999	41 181
1952-53	1 504	19 621	3 874	23 495	31 953	67 333	142 007	60 997	29 925	45 240
1953-54	1 545	20 249	4 340	24 589	34 763	74 851	155 822	66 129	33 993	54 984
1954-55	1 597	21 045	4 407	25 452	37 727	84 930	177 202	76 228	39 206	59 758
1955-56	1 594	22 128	4 934	27 062	43 196	95 882	207 558	91 862	93 158	80 849
1956-57	1 595	22 482	5 188	27 670	47 273	101 274	220 780	97 365	112 946	89 672
1957-58	1 655	23 081	5 003	28 084	50 641	100 582	227 651	103 660	118 906	93 719
1958-59	1 666	23 504	4 920	28 424	51 656	103 093	236 587	108 602	123 660	96 451
1959-60	1 683	24 408	5 254	29 662	57 573	119 822	268 500	120 392	144 024	107 315
1960-61	1 766	24 811	5 347	30 158	60 659	122 508	275 902	124 892	147 099	112 632
1961-62	1 760	24 742	5 328	30 070	61 440	126 128	283 547	127 874	159 149	121 589
1962-63	1 764	25 453	5 302	30 755	64 837	131 100	303 920	142 033	163 919	138 159
1963-64	1 746	26 221	5 612	31 833	70 582	154 613	341 065	152 571	168 403	141 651
1964-65	1 805	26 768	5 812	32 580	76 315	175 920	381 549	167 251	209 010	155 336
1965-66	1 792	28 041	6 274	34 315	82 963	188 678	404 581	175 606	211 923	158 672
1966-67	1 771	28 364	6 515	34 879	90 756	201 027	437 964	194 571	233 983	169 159
1967-68	1 797	28 550	6 628	35 178	96 236	203 084	445 076	198 019	263 364	184 683

(a) Commencing with 1927-28, the number of persons employed is the average over the whole year; prior to the date the number represents the average over the period of operation.

(b) Excludes amounts drawn by working proprietors.

(c) Value of goods manufactured and work done.

(d) Value of output less recorded costs of manufacture other than labour.

(Chapter 14)

Economic Censuses: Manufacturing, Tasmania (a)

Year (b)	Establishments operating at 30 June	Employment (average over whole year) (c)			Wages and Salaries (\$'000)	Turnover (b) (\$'000)	Purchases, transfer in and selected expenses (e) (\$'000)	Value added (f) (\$'000)	Fixed capital expenditure (g) (\$'000)
		Males	Females	Persons					
1968-69	951	24 892	6 182	31 074	95 065	487 109	301 739	197 464	35 080
1969-70	945	25 371	6 389	31 760	102 104	541 636	317 546	226 083	49 443
1971-72	933	24 856	6 151	31 007	119 411	595 612	359 300	245 068	25 944
1972-73	912	24 668	6 016	30 684	130 703	678 763	394 628	283 420	24 893
1973-74	935	25 203	6 324	31 527	161 386	818 049	494 785	340 250	24 798
1974-75(b)	628	23 699	5 153	28 852	194 883	905 656	558 632	402 253	53 146
1975-76	667	22 827	4 926	27 753	211 327	1 029 579	577 393	456 029	43 936
1976-77	617	23 042	4 724	27 766	246 014	1 199 311	694 445	533 288	34 472
1977-78	599	22 022	4 944	26 966	258 341	1 245 979	742 171	497 979	47 243
1978-79	552	21 386	4 680	26 066	266 099	1 401 463	861 690	549 372	77 116
1979-80	543	21 520	4 638	26 158	298 196	1 656 092	1 045 867	653 770	55 933
1980-81	558	21 942	4 586	26 528	346 551	1 867 080	1 175 515	713 445	60 208

(a) Details are not comparable with those contained in the preceding table.

(b) No census was conducted in 1970-71. From 1974-75 figures exclude details for single establishment enterprises with less than four persons employed.

(c) Includes working proprietors and employees at separately located administrative and ancillary units.

(d) Turnover plus increase (or less decrease) in the value of stocks less purchases, transfers in and selected expenses.

(e) Includes transfers in of goods from other establishments of the enterprise, charges for commission and sub-contract work, repair and maintenance expenses, outward freight and cartage, motor vehicle running expenses and sales commission payments.

(f) Comprises sales of goods, transfers out of goods to establishments of the same enterprise, bounties and subsidies on production, all other operating revenue from outside the enterprise and capital work done for own use, rental or lease.

(g) Outlay on fixed tangible assets less disposals.

(Chapter 15)

Hydro-Electric Commission, Tasmania

Year	Installed generator capacity (a)	Number of retail consumers	Gross revenue	Working expenses and other charges
	kW	no.	\$'000	\$'000
1929-30	49 000	n.a.	692	636
1934-35	54 250	n.a.	814	754
1939-40	104 500	n.a.	1 212	1 172
1944-45	160 500	55 073	1 776	1 588
1949-50	184 500	75 927	2 938	2 926
1959-60	541 150	117 266	14 570	14 932
1964-65	856 550	131 593	25 009	23 500
1965-66	807 550	134 679	26 293	25 569
1966-67	849 150	135 941	28 299	27 058
1967-68	945 300	139 886	27 627	28 607
1968-69	1 005 600	143 551	33 638	31 824
1969-70	1 031 600	146 958	37 296	35 095
1970-71	1 281 200	149 911	40 151	40 070
1971-72	1 309 200	152 934	46 286	46 278
1972-73	1 352 400	156 570	49 511	49 297
1973-74	1 342 400	160 307	52 730	54 026
1974-75	1 442 400	163 479	62 295	61 870
1975-76	1 462 400	167 507	72 699	72 312
1976-77	1 492 400	171 847	80 372	80 292
1977-78	1 636 400	176 005	95 519	95 269
1978-79	1 780 400	179 861	109 130	108 930
1979-80	1 780 400	183 607	120 505	119 993
1980-81	1 780 400	187 072	139 107	136 712
1981-82	1 860 300	189 727	165 236	159 270

(a) Excludes King and Flinders Islands.

(Chapter 16)

Value of Retail Sales by Commodity Groups, Tasmania
(\$ Million)

Year	Groceries	Butchers' meat	Other food (a)	Beer, wine, spirits (b)	Clothing, drapery, piece- goods, footwear	Domestic hardware (c)	Electrical goods (d)	Furniture, floor coverings	Other goods (e)	Total (excl. motor vehicles, etc.)
1952-53 (f)	17.3	9.1	11.9	10.7	25.7	3.1	4.6	4.9	16.3	103.6
1956-57 (f)	23.4	11.1	15.1	14.8	30.4	3.3	6.3	6.4	20.3	131.1
1961-62 (f)	28.6	13.9	20.0	17.0	35.3	4.1	10.7	7.2	29.3	166.1
1962-63	29.3	14.9	21.4	16.9	36.0	4.4	11.7	7.8	30.5	172.9
1963-64	31.6	15.5	20.6	18.5	38.4	4.4	11.5	7.9	31.8	180.2
1964-65	33.6	17.1	21.9	18.9	40.6	4.4	11.3	8.5	34.7	191.0
1965-66	35.2	17.8	22.7	20.3	41.6	4.5	11.2	8.7	36.3	198.3
1966-67	36.5	19.4	24.2	23.3	45.5	5.1	11.7	10.1	39.2	215.0
1967-68	37.3	19.9	26.1	25.0	48.9	5.5	12.4	11.2	41.6	227.9
1968-69 (f)	48.7	20.7	23.1	30.9	49.5	8.8	13.4	12.6	49.9	257.6
1969-70	41.7	21.0	30.7	28.7	62.2	6.1	13.3	12.9	49.4	256.0
1970-71	45.2	21.3	32.6	30.7	55.6	6.7	13.6	13.5	52.9	272.1
1971-72	50.0	22.2	33.9	32.4	59.7	7.5	15.4	14.4	55.8	291.3
1972-73	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	319.5
1973-74 (f)	67.0	28.9	39.2	50.2	83.8	12.7	25.2	23.4	71.9	402.3
1974-75	76.7	31.3	47.2	61.7	100.3	17.1	36.1	28.9	86.1	485.4
1975-76	87.3	31.2	49.7	68.8	101.6	22.1	48.3	31.7	91.6	532.3
1976-77	110.4	35.7	58.0	77.5	117.3	24.5	56.4	34.6	103.6	618.0
1977-78	120.8	37.6	64.0	91.6	133.1	29.0	53.1	37.8	118.4	685.4
1978-79	132.0	48.2	72.8	100.5	141.2	29.5	53.2	38.8	134.3	750.5
1979-80 (f)	168.0	55.9	71.9	105.6	151.0	28.2	53.0	39.0	144.3	816.9
1980-81	171.5	55.2	99.0	114.0	154.6	35.5	54.1	39.9	161.9	885.7
1981-82	195.1	60.3	106.8	122.3	166.6	38.8	57.0	42.3	178.9	968.1

(a) Includes fresh fruit and vegetables, confectionery, soft drinks, ice cream, cakes, pastry, cooked provisions, fish, etc., but excludes some delivered milk and bread.

(b) Excludes sales from licensed clubs.

(c) Excludes basic building materials (e.g. timber, roofing tiles, etc.), builders' hardware and supplies.

(d) Includes radios, televisions and accessories, musical instruments, domestic refrigerators, etc.

(e) Includes tobacco, cigarettes, newspapers, books, stationery, chemists' goods, jewellery, etc.

(f) Census figures.

(Chapter 16)

Value of Trade by Sea and Air and Vessels Entered and Cleared Tasmanian Ports

Year	Imports				Exports				Vessels entered Tasmanian ports	
	Overseas		Interstate		Overseas (b)		Interstate (b)		no.	'000 net tons
	By sea	By sea (a)	By air	Total (a)	By sea and air	By sea	By air	Total		
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000		
1830	n.a.	n.a.		510	n.a.	n.a.		292	101	27
1840	n.a.	n.a.		1 976	n.a.	n.a.		1 734	492	85
1850	n.a.	n.a.		1 318	n.a.	n.a.		1 288	674	104
1860	1 686	450		2 136	1 544	380		1 924	806	116
1870	698	888		1 586	562	736		1 298	613	106
1880	738	2 000		2 738	1 568	1 456		3 024	654	205
1890	1 594	2 202		3 796	792	2 182		2 974	746	476
1900	1 402	2 746		4 148	3 078	2 144		5 222	741	619
1910	1 662	(d)		n.a.	1 040	(d)		n.a.	979	1 211
1919-20	1 626	(d)		n.a.	4 022	(d)		n.a.	841	632
1929-30	3 668	16 028		19 696	4 978	13 198		18 176	1 076	1 390
1930-31	1 582	12 878		14 460	4 214	9 754		13 968	992	1 319
1931-32	1 130	11 938		13 068	4 106	9 980		14 086	980	1 307
1932-33	1 128	12 464		13 592	3 582	9 790		13 372	1 030	1 461
1933-34	1 274	13 582	n.a.	14 856	4 766	10 254	n.a.	15 020	1 066	1 547
1934-35	1 476	14 452		15 928	4 318	11 844		16 162	1 128	1 610
1935-36	2 498	17 134		19 632	5 502	13 116		18 618	1 191	1 977
1936-37	2 586	18 858		21 444	6 822	14 376		21 198	1 317	2 093
1937-38	3 858	19 854		23 712	5 774	16 500		22 274	1 377	2 202
1938-39	2 838	20 166		23 004	6 796	17 670		24 466	1 384	2 231
1939-40	3 188	21 780		24 968	4 852	20 954		25 806	1 243	1 512
1940-41	2 364	21 876		24 240	3 120	24 052		27 172	1 147	1 264
1941-42	1 918	24 276		26 194	3 746	28 566		32 312	1 031	1 030
1942-43	2 300	26 236		28 536	1 770	30 680		32 450	873	760
1943-44	2 384	26 162		28 546	2 298	35 288		37 586	804	796
1944-45	1 664	27 796		29 460	5 062	36 708		41 770	760	732
1945-46	2 614	29 400		32 014	7 224	33 040		40 264	728	833
1946-47	3 626	37 810		41 436	10 162	32 932		43 094	751	957
1947-48	8 564	44 000		52 564	18 566	35 066		53 632	787	1 106
1948-49	12 512	46 674		59 186	24 980	37 064		62 044	805	1 125
1949-50	18 704	51 218	(e) 10 670	80 592	29 936	42 672	(e) 3 996	76 604	862	1 183
1950-51	25 058	60 636	18 326	104 020	48 514	53 740	6 392	108 646	905	1 279
1951-52	41 422	76 024	20 474	137 920	37 024	71 684	6 018	114 726	902	1 323
1952-53	26 632	76 658	19 936	123 226	43 696	72 804	11 568	128 068	1 012	1 480
1953-54	26 098	87 438	22 164	135 700	35 466	81 488	13 580	130 534	1 060	1 508
1954-55	30 258	89 958	19 148	139 364	37 524	85 376	14 494	137 394	1 081	1 620
1955-56	24 884	99 608	21 166	145 658	40 608	100 630	18 762	160 000	1 030	1 586
1956-57	27 764	105 788	20 020	153 572	45 004	108 654	18 112	171 770	1 161	1 737
1957-58	25 466	113 636	19 122	158 224	44 506	109 652	18 354	172 512	1 241	1 872
1958-59	26 374	121 138	19 718	167 230	43 932	114 424	17 584	175 940	1 257	1 966
1959-60	27 606	130 014	19 210	176 830	47 730	137 530	20 818	206 078	1 308	2 287
1960-61	37 208	141 086	19 356	197 650	42 588	143 036	21 944	207 568	1 354	2 546
1961-62	26 788	141 776	18 000	186 564	57 196	140 794	23 298	221 288	1 533	3 042
1962-63	35 746	150 620	18 158	204 524	66 792	146 454	21 602	234 848	1 614	3 474
1963-64	35 032	167 964	19 840	222 836	73 318	173 590	23 424	275 332	1 508	3 346
1964-65	35 717	170 963	20 819	227 449	87 315	193 371	25 770	306 456	1 472	3 412
1965-66	43 585	192 732	21 123	257 441	92 007	212 785	25 575	330 367	(f) 1 645	(f) 3 887
1966-67	51 376	209 456	20 311	281 143	88 834	224 975	25 680	339 490	1 684	4 085
1967-68	45 024	220 065	20 590	285 679	76 888	233 694	26 941	337 524	1 676	4 102
1968-69	37 509	241 398	21 051	299 958	102 061	265 476	25 825	393 362	1 795	4 645
1969-70	46 998	257 441	20 551	324 989	143 470	286 083	26 287	455 840	1 759	5 574
1970-71	45 719	269 022	19 777	334 519	143 198	277 669	27 103	447 970	1 639	5 338
1971-72	39 749	281 576	20 622	341 947	178 950	302 608	29 374	510 932	1 754	5 937
1972-73	45 045	289 862	21 238	356 145	218 712	320 910	30 626	570 247	1 788	7 239
1973-74	69 277	357 805	24 760	451 843	259 745	404 382	34 566	698 692	1 631	7 225
1974-75	100 616	402 081	26 850	529 547	226 154	379 933	31 699	637 786	1 611	6 820
1975-76	76 262	503 497	27 882	607 641	250 580	441 391	36 280	728 251	1 536	6 733
1976-77	94 622	564 231	30 909	689 762	338 657	485 850	35 160	859 667	1 592	7 258
1977-78	115 778	594 793	39 388	749 960	381 942	594 441	38 206	1 014 589	1 528	6 992
1978-79	140 652	621 548	74 578	836 828	513 286	627 186	39 727	1 180 199	n.a.	n.a.
1979-80	179 780	935 584	53 481	1 168 845	646 827	767 974	32 141	1 446 942	n.a.	n.a.
1980-81	172 456	973 685	60 922	1 207 063	658 013	829 076	45 171	1 532 261	n.a.	n.a.

(a) Data for 1979-80 onwards are not directly comparable with data for previous years because of revisions to estimating procedures to take account of inadequate documentation available for interstate imports by sea.

(b) Data for 1978-79 onwards are not directly comparable with data for previous years. From 1 July 1978 overseas export figures relate to all goods leaving Tasmania for overseas countries. Prior to that date export figures relate to only goods leaving Tasmania for overseas countries for which documents had been lodged with customs in Tasmania.

(c) In this section each vessel is recorded as an entry at the first Tasmanian port of call only; intrastate movements are excluded.

(d) Collection discontinued until 1922-23.

(e) Not collected before 1949-50.

(f) From 1966-67 not comparable with previous years; details are now confined to vessels of over 200 registered net tons engaged solely in trade.

(Chapter 17)

Overseas and Interstate Exports of Selected Commodities, Tasmania

Year	Butter (incl. butter oil)		Fresh fruit— apples and pears		Meat		Cheese		Wool, greasy (a)	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	tonnes	\$'000	tonnes	\$'000	tonnes	\$'000	tonnes	\$'000	tonnes	\$'000
1945-46	1 293	406	66 820	1 894	186	34	612	112	4 113	1 438
1946-47	1 340	688	19 908	1 028	312	83	993	180	5 275	2 706
1947-48	1 926	798	55 565	4 204	282	44	273	66	4 446	4 206
1948-49	2 475	1 268	31 481	2 366	789	122	181	41	6 365	6 758
1949-50	2 179	1 278	56 911	4 348	1 151	369	113	29	4 128	6 202
1950-51	1 958	1 173	64 841	6 828	915	302	63	17	5 446	18 688
1951-52	2 239	1 266	56 627	7 410	1 103	475	120	44	6 689	9 366
1952-53	2 397	1 802	77 288	11 578	1 753	818	39	18	7 643	12 030
1953-54	2 043	1 600	77 652	10 135	658	349	73	18	7 018	11 314
1954-55	3 944	3 026	72 112	8 950	1 676	814	39	39	8 011	12 190
1955-56	4 988	3 463	92 569	11 498	2 470	1 076	36	23	8 387	11 140
1956-57	6 101	3 452	58 836	7 936	2 074	883	102	73	9 392	16 198
1957-58	5 939	3 420	96 260	14 664	2 996	1 190	101	45	10 731	14 260
1958-59	7 065	4 828	87 781	11 338	5 469	2 415	69	51	11 415	12 106
1959-60	7 864	5 390	80 683	9 490	9 225	3 801	90	64	12 689	15 254
1960-61	5 419	3 298	92 730	11 226	6 896	3 212	60	47	11 068	12 560
1961-62	7 572	3 942	122 417	15 572	7 754	3 250	121	50	12 341	14 206
1962-63	8 597	4 368	108 438	17 508	9 933	4 737	578	269	11 919	15 338
1963-64	8 315	4 372	135 205	19 454	11 018	5 505	895	328	11 378	17 604
1964-65	10 374	5 914	99 410	14 260	12 881	6 645	1 707	761	13 756	16 593
1965-66	8 878	5 214	134 482	20 651	12 749	7 038	2 887	1 493	15 442	20 155
1966-67	9 140	5 259	96 085	11 872	13 727	7 939	3 530	1 642	16 238	20 373
1967-68	8 992	5 107	115 873	14 647	11 345	7 042	4 190	1 854	13 994	15 041
1968-69	9 243	5 129	96 242	13 154	12 910	7 989	1 930	884	15 798	18 592
1969-70	12 611	6 950	109 382	14 905	17 084	11 774	7 267	2 957	16 512	17 821
1970-71	10 664	5 954	96 670	13 474	15 755	10 706	6 259	2 589	17 145	14 350
1971-72	9 829	8 067	74 848	11 092	21 463	14 161	6 816	3 875	20 413	17 180
1972-73	7 437	6 104	84 066	11 566	23 061	20 368	6 656	4 085	17 735	34 579
1973-74	8 269	6 441	92 116	16 458	22 167	22 507	7 730	5 930	16 963	38 319
1974-75	5 012	4 460	57 473	10 261	18 456	12 237	10 386	7 922	15 947	26 640
1975-76	9 720	7 527	47 114	8 756	20 883	17 192	9 026	7 633	17 435	31 232
1976-77	4 363	3 851	24 847	5 732	22 951	20 281	14 552	12 317	16 204	33 685
1977-78	6 248	5 941	42 257	11 092	20 984	21 557	15 222	14 409	10 805	24 048
1978-79	2 561	3 146	40 405	11 794	24 569	37 240	16 516	18 247	16 306	38 756
1979-80	2 871	4 343	45 467	13 828	21 104	41 670	12 188	13 188	13 213	36 630
1980-81	1 510	2 703	39 932	12 467	19 718	35 890	13 392	15 384	16 356	48 422

(Chapter 17)

Overseas and Interstate Exports of Selected Commodities, Tasmania

Year	Sheep skins (with and without wool)		Textile yarn and fabrics	Refined zinc		Ores and concentrates	Timber (dressed and undressed)	
	Quantity	Value		Quantity	Value		Quantity	Value
	tonnes	\$'000	\$'000	tonnes	\$'000	\$'000	m ³	\$'000
1945-46	1 890	326	4 599	75 454	4 214	1 668	73 206	1 132
1946-47	1 811	480	4 607	80 378	4 674	2 298	75 344	1 228
1947-48	963	452	5 681	66 411	4 906	3 074	96 188	1 584
1948-49	1 205	564	6 688	78 667	8 832	3 832	116 094	2 104
1949-50	1 500	816	5 580	81 999	9 964	4 076	146 625	2 930
1950-51	1 014	1 688	9 266	80 836	15 054	5 704	135 668	3 230
1951-52	1 434	1 232	7 498	77 090	18 606	11 714	134 604	4 428
1952-53	1 512	1 020	11 572	91 557	19 342	9 722	122 230	5 112
1953-54	1 333	1 098	13 552	97 593	17 222	8 544	135 751	6 700
1954-55	2 230	1 590	12 476	87 746	16 574	8 138	147 389	7 156
1955-56	1 873	1 356	14 674	100 611	19 888	10 836	140 938	6 570
1956-57	2 122	1 796	15 766	105 314	19 662	10 700	146 502	6 874
1957-58	2 138	1 674	16 112	105 541	18 190	8 088	132 242	4 616
1958-59	2 565	1 288	14 166	116 271	20 054	4 824	153 378	6 844
1959-60	3 216	2 078	17 524	115 680	22 922	5 952	177 931	8 952
1960-61	3 071	1 786	19 188	109 664	21 020	6 760	149 657	9 554
1961-62	3 050	1 892	21 278	133 012	23 680	6 030	134 033	8 588
1962-63	2 885	1 904	19 842	136 302	23 778	6 338	142 979	9 858
1963-64	3 359	2 844	21 918	134 201	27 910	9 102	168 480	11 176
1964-65	2 676	1 953	24 139	141 263	37 327	9 570	189 832	12 811
1965-66	3 268	2 465	24 077	137 257	38 331	11 302	174 297	12 145
1966-67	3 402	2 456	24 102	155 273	41 249	12 560	187 474	13 672
1967-68	2 722	1 369	25 487	120 312	33 106	17 816	183 817	13 492
1968-69	3 988	2 148	27 563	139 479	34 006	44 018	194 936	15 329
1969-70	3 236	1 790	27 784	163 847	42 625	63 478	207 242	16 238

continued next page

(Chapter 17)

Overseas and Interstate Exports of Selected Commodities, Tasmania—continued

Year	Sheep skins (with and without wool)		Textile yarn and fabrics	Refined zinc		Ores and concentrates	Timber (dressed and undressed)	
	Quantity	Value		Quantity	Value		Quantity	Value
	tonnes	\$'000		tonnes	\$'000		m'	\$'000
1970-71	3 710	1 684	28 425	142 755	38 163	81 604	200 583	17 201
1971-72	3 765	1 799	29 938	194 259	55 149	88 777	202 331	17 385
1972-73	3 618	3 280	31 680	208 349	63 707	87 543	224 828	27 970
1973-74	2 303	2 926	41 174	190 293	77 143	94 381	270 248	22 556
1974-75	2 816	2 258	31 454	139 253	74 298	91 240	213 428	30 636
1975-76	2 943	2 413	41 656	138 243	74 926	92 588	238 440	25 867
1976-77	2 334	2 765	35 811	162 001	98 318	144 947	313 227	37 083
1977-78	2 565	3 565	33 285	167 870	87 129	164 014	260 738	38 282
1978-79	2 504	3 708	43 815	214 243	122 263	202 415	238 145	38 609
1979-80	2 683	5 417	37 184	185 327	127 264	248 942	291 453	88 238
1980-81	2 330	3 231	45 047	194 115	135 276	n.a.	265 488	85 254

(a) Excludes greasy wool on exported skins.

(Chapter 17)

Motor Vehicle Registrations, Tasmania (a)

Year	Motor vehicles on the register at end of year					New motor vehicles registered during year			
	Motor cars and station wagons		Commercial vehicles (^{'000})	Motor cycles (^{'000})	Total (^{'000})	Motor cars and station wagons	Commercial vehicles	Motor cycles	Total
	Number (^{'000})	Persons per vehicle registered							
1924-25	5.8	36.9	(b) 0.8	2.7	9.3	n.a.	n.a.	n.a.	n.a.
1929-30	12.5	17.6	(c) 2.2	4.8	19.5	1 627	939	3 118	3 118
1934-35	12.9	17.8	3.0	3.9	19.8	982	422	171	1 575
1939-40	17.6	13.6	5.2	3.4	26.2	1 400	540	176	2 116
1949-50	25.3	10.9	12.9	4.9	43.2	3 311	1 565	886	5 762
1950-51	28.8	9.9	15.1	5.3	49.2	4 187	2 319	960	7 466
1951-52	32.5	9.1	16.8	5.7	55.1	4 267	2 073	938	7 278
1952-53	35.4	8.6	19.4	5.7	60.5	3 368	1 724	474	5 566
1953-54	40.0	7.7	19.7	5.6	65.4	4 178	1 896	450	7 064
1954-55	44.9	7.0	21.5	5.3	71.7	5 738	2 285	417	8 440
1955-56	48.0	6.6	21.9	4.8	74.7	5 457	2 179	332	7 968
1956-57	51.7	6.3	22.6	4.4	78.6	5 309	1 988	340	7 637
1957-58	55.9	6.0	23.9	4.0	83.8	5 337	1 944	225	7 506
1958-59	59.1	5.7	25.0	3.6	87.7	5 362	2 113	176	7 651
1959-60	63.7	5.4	26.4	3.1	93.2	6 527	2 115	96	8 738
1960-61	68.1	5.1	26.7	2.6	97.4	6 723	2 058	61	8 842
1961-62	72.8	4.9	27.4	2.4	102.6	6 931	1 778	59	8 768
1962-63	77.9	4.6	27.5	1.9	107.3	9 003	1 986	52	11 041
1963-64	84.4	4.3	28.0	1.7	114.1	10 268	2 343	53	12 664
1964-65	91.3	4.0	28.9	1.5	121.7	10 522	2 389	69	12 980
1965-66	96.8	3.8	29.7	1.5	128.0	10 133	2 878	207	13 218
1966-67	101.7	3.7	30.2	1.6	133.5	10 390	2 611	380	13 381
1967-68	107.7	3.5	31.1	2.2	141.0	11 738	2 412	751	14 901
1968-69	113.7	3.4	32.2	2.8	148.7	10 845	2 529	781	14 155
1969-70	118.6	3.3	32.6	3.1	154.3	11 399	2 456	799	14 654
1970-71	124.9	3.1	32.9	3.5	161.3	11 792	2 550	794	15 136
1971-72	130.2	3.0	33.8	3.8	167.8	11 961	2 492	978	15 431
1972-73	135.4	2.9	34.6	4.5	174.5	12 970	2 813	1 343	17 126
1973-74	141.2	2.8	35.3	6.1	182.6	13 674	2 846	2 600	19 120
1974-75	150.3	2.7	36.6	7.4	194.3	16 097	3 980	2 749	22 826
1975-76	156.9	2.6	39.1	6.8	202.8	14 410	3 971	1 831	20 212
1976-77	162.7	2.5	40.5	6.2	209.4	14 520	4 260	1 428	20 208
1977-78	171.9	2.4	41.2	5.0	218.1	13 884	4 170	972	19 026
1978-79	178.8	2.3	42.9	4.8	226.6	13 928	3 401	892	18 221
1979-80	177.2	2.3	47.5	4.7	229.5	13 333	3 454	1 089	17 876
1980-81	183.4	2.3	48.5	5.4	237.3	13 563	3 444	1 278	18 285
1981-82	190.0	2.3	50.8	5.8	246.6	12 210	3 302	1 110	16 622

(a) Includes State Government and Commonwealth Government-owned vehicles but excludes those belonging to the Defence Services.

(b) Trucks only.

(c) From 1929-30 includes trucks, utilities, panel vans and omnibuses.

STATISTICAL SUMMARY

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(Chapter 17)

Motor Vehicles on Register and Traffic Accidents, Tasmania

Year	Motor vehicles on the register at end of year (a)		Traffic accidents involving casualties					
	Number ('000)	Persons per vehicle registered	Accidents		Persons killed		Persons injured	
			Number	Per 10 000 vehicles registered (b)	Number	Per 10 000 vehicles registered (b)	Number	Per 10 000 vehicles registered (b)
1949-50	43.2	6.4	969	242	64	16.0	1 154	288
1954-55	71.7	4.4	864	127	57	8.3	1 111	163
1959-60	93.2	3.7	743	82	79	8.7	1 004	111
1960-61	97.4	3.6	844	89	75	7.9	1 157	121
1961-62	102.6	3.5	872	87	72	7.2	1 207	121
1962-63	107.3	3.4	919	87	67	6.4	1 354	129
1963-64	114.1	3.2	1 118	101	80	7.2	1 656	150
1964-65	121.7	3.0	1 180	100	97	8.2	1 692	143
1965-66	128.0	2.9	1 291	103	88	7.0	1 955	157
1966-67	133.5	2.8	1 356	104	102	7.8	2 081	159
1967-68	141.0	2.7	1 268	92	112	8.2	1 990	145
1968-69	148.7	2.6	1 400	97	122	8.4	2 228	154
1969-70	154.3	2.5	1 413	93	122	8.0	2 268	150
1970-71	161.3	2.4	1 396	89	124	7.9	2 031	129
1971-72	167.8	2.3	1 371	83	118	7.2	1 984	120
1972-73	174.5	2.3	1 423	83	83	4.8	2 052	119
1973-74	182.6	2.2	1 454	81	126	7.0	2 046	114
1974-75	194.3	2.1	1 466	77	120	6.3	2 061	108
1975-76	202.8	2.0	1 502	74	107	5.3	2 160	107
1976-77	209.4	2.0	1 606	77	103	4.9	2 314	110
1977-78	218.1	1.9	1 674	78	118	5.5	2 402	112
1978-79	226.6	1.8	1 537	69	98	4.4	2 113	95
1979-80	229.5	1.8	1 510	65	77	3.3	2 140	93
1980-81	237.3	1.8	1 634	69	120	5.1	2 186	93
1981-82	246.6	1.7	1 532	62	114	4.6	2 209	90

(a) Includes cars, commercial vehicles, motor cycles and Commonwealth-owned vehicles other than Defence Services' vehicles.

(b) Based on average number of motor vehicles (including motor cycles) on the register.

(Chapter 17)

Metropolitan Transport Trust Passenger Services, Tasmania

Metropolitan Transport Trust (a)							
Year	Hobart and Launceston services					Revenue (b)	Expenditure (c)
	Route kilometres open for traffic	Hobart		Launceston			
		Vehicle kilometres	Passenger journeys	Vehicle kilometres	Passenger journeys		
		daily average	daily average	daily average	daily average	\$'000	\$'000
1955-56	121	10 602	50 028	4 060	18 006	1 304	1 690
1960-61	198	16 964	49 946	5 058	17 462	1 997	2 586
1961-62	203	17 022	48 994	5 055	17 217	1 955	2 629
1962-63	208	16 732	48 051	4 736	16 279	1 905	2 537
1963-64	222	17 537	47 554	4 775	15 731	1 882	2 584
1964-65	224	17 566	45 985	4 598	15 183	1 829	2 606
1965-66	243	17 239	43 383	4 760	14 767	1 964	2 749
1966-67	248	17 323	42 967	4 843	14 728	2 124	3 008
1967-68	259	17 408	41 803	4 947	13 953	2 158	3 122
1968-69	286	17 745	40 675	4 730	13 365	2 270	3 250
1969-70	290	17 886	39 932	4 801	13 018	2 332	3 358
1970-71	290	18 055	40 058	4 633	12 521	2 321	3 741
1971-72	291	17 703	37 584	4 585	11 708	2 639	3 949
1972-73	308	17 106	36 572	4 530	11 397	2 659	4 333
1973-74	314	17 585	38 027	4 604	11 988	2 751	5 283
1974-75	364	19 031	40 791	4 650	12 055	2 916	8 299
1975-76	357	19 850	40 646	4 704	11 969	3 000	8 084
1976-77	358	20 791	39 507	4 219	11 283	2 862	8 945
1977-78	365	21 405	39 314	4 269	10 767	3 547	10 151
1978-79	366	20 685	34 870	4 148	9 552	4 186	10 672
1979-80	368	20 333	34 384	4 345	9 515	4 183	11 300
1980-81	387	21 551	34 161	4 306	9 368	4 896	13 458
1981-82 (d)	395	20 922	28 803	4 175	7 836	5 625	14 524

(a) Includes tram, omnibus and trolley-bus services originally under municipal control but taken over by Metropolitan Transport Trust on 1.7.55. Trams ceased operating: Hobart 21.10.60; Launceston 13.12.52.

(b) Prior to 1955-56 includes government grants; see note (a) above.

(c) Includes interest, redemption and depreciation.

(d) The method used for calculating passengers changed after a change in ticketing procedures revealed inaccuracies.

Year	Mail posted in Tasmania or received from overseas			Registered articles
	Letters and postcards	News-papers and packets	Parcels	
	'000	'000	'000	
1929-30	39 956	7 128	198	307
1934-35	35 746	5 405	121	253
1939-40	33 874	5 525	132	314
1944-45	37 804	5 885	350	621
1949-50	50 038	8 440	368	674
1954-55	42 999	9 107	268	625
1959-60	43 020	9 629	233	456
1960-61	43 242	9 432	231	404
1961-62	42 603	9 714	242	390
1962-63	45 202	9 183	237	379
1963-64	47 452	9 340	232	371
1964-65	49 108	9 549	263	371
1965-66	51 710	10 309	288	375
1966-67	55 594	10 531	302	379
1967-68	55 273	10 141	303	349
1968-69	56 516	9 425	282	325
1969-70	58 824	8 953	300	312
1970-71	57 916	8 640	353	313
1971-72	54 780	6 773	352	268
1972-73	63 187		358	228
1973-74	63 272		289	203
1974-75	59 644		308	193
1975-76	44 829	5 528	220	132
1976-77	45 406	5 627	310	126
1977-78	48 690	7 569	342	124
1978-79	51 828	12 252	379	121
1979-80	53 902	10 962	444	119
1980-81	57 204	6 628	544	127

Year	Telegrams			Telephones		Radiocommunication, broadcasting and television stations		
	Despatched to and received from other countries	Despatched to places within Australia	Telephone exchanges	Telephone services connected at end of period		Radio-communication	Broad-casting	Tele-vision
				Lines	Instru-ments			
	'000	'000	no.	'000	'000	no.	no.	no.
1929-30	19	455	360	12	15	20	3	..
1934-35	18	387	342	12	15	40	4	..
1939-40	16	471	357	15	19	25	11	..
1944-45	30	826	354	17	22	22	11	..
1949-50	36	952	370	23	31	198	11	..
1954-55	41	648	390	34	46	434	12	..
1959-60	43	537	391	47	63	882	12	2
1964-65	52	550	365	59	82	2 574	12	4
1965-66	60	582	349	62	86	2 951	12	4
1966-67	53	621	331	65	89	3 561	12	4
1967-68	(a) 21	575	312	67	93	3 856	12	4
1968-69	24	562	288	70	98	4 377	12	4
1969-70	24	542	273	75	105	4 994	12	4
1970-71	36	499	257	78	114	5 499	12	4
1971-72	36	458	238	80	113	5 892	12	5
1972-73	473		230	85	118	6 390	12	5
1973-74	472		224	90	127	6 570	12	5
1974-75	424		212	96	133	7 347	12	5
1975-76	356		206	100	140	7 915	12	5
1976-77	298		198	105	146	8 687	15	5
1977-78	242		197	112	155 (b)	14 747	15	5
1978-79	178		196	118	164	13 936	15	5
1979-80	135		196	125	174	14 018	16	5
1980-81	122		197	133	202	12 975	16	5
1981-82	107		197	139	192	12 860	16	5

(a) From 1967-68 excludes telegrams received, details of which are no longer available.

(b) Includes licensed Citizens Band Radio Service operators from 1977-78.

(Chapter 18)

Fire, Marine and General Insurance: Expenditure on Claims, Tasmania
(\$'000)

Year	Claims	Year	Claims
1939-40	357	1970-71	13 214
1944-45	357	1971-72	15 279
1949-50	942	1972-73	18 249
1954-55	2 743	1973-74	23 507
1959-60	5 404	1974-75	29 979
1964-65	7 854	1975-76	29 952
1965-66	9 153	1976-77	42 010
1966-67	16 158	1977-78	50 279
1967-68	16 890	1978-79	55 373
1968-69	10 865	1979-80	60 244
1969-70	12 285	1980-81	75 036

(Chapter 18)

Banking, Tasmania
(\$'000)

Year	Trading banks (including Commonwealth Trading Bank) (a)			Savings banks (b)	Depositors' balances at end of year	Year	Trading banks (including Commonwealth Trading Bank) (a)			Savings banks (b)	Depositors' balances at end of year
	Deposits	Advances	Debits to customers' accounts (c)				Deposits	Advances	Debits to customers' accounts (c)		
1935-36				13 636	1959-60	79 574	45 948	31 000	92 712		
1936-37				14 430	1960-61	76 454	48 010	32 600	94 776		
1937-38				15 384	1961-62	78 952	49 340	32 080	102 460		
1938-39				16 792	1962-63	83 178	53 176	35 068	112 856		
1939-40				17 036	1963-64	86 210	55 122	37 062	124 770		
1940-41	n.a.	n.a.	n.a.	17 882	1964-65	94 604	54 176	41 340	135 736		
1941-42				18 944	1965-66	102 507	55 214	43 105	148 401		
1942-43				22 348	1966-67	112 091	60 460	47 103	167 106		
1943-44				28 426	1967-68	117 811	69 297	51 222	177 827		
1944-45				33 828	1968-69	124 473	72 394	55 896	190 043		
1945-46	34 560	7 346	5 778	40 894	1969-70	131 501	77 603	61 173	199 790		
1946-47	35 504	10 168	6 748	41 712	1970-71	133 587	86 976	64 177	217 663		
1947-48	37 360	14 954	7 894	43 144	1971-72	135 099	88 098	69 970	242 856		
1948-49	39 620	20 084	9 398	44 826	1972-73	159 141	99 192	85 291	288 986		
1949-50	44 114	22 834	11 210	48 544	1973-74	207 040	121 077	103 041	328 029		
1950-51	53 444	26 636	14 740	54 310	1974-75	229 851	137 189	119 447	382 326		
1951-52	61 474	33 378	17 712	60 238	1975-76	277 377	157 951	150 536	430 618		
1952-53	58 270	33 440	17 700	64 156	1976-77	348 613	207 635	179 932	477 134		
1953-54	62 286	37 800	19 876	67 894	1977-78	375 773	250 144	193 310	530 457		
1954-55	65 826	43 670	21 432	71 618	1978-79	415 180	300 811	220 074	587 755		
1955-56	68 562	44 582	23 242	74 422	1979-80	425 910	345 930	256 249	642 129		
1956-57	72 976	40 406	25 200	77 518	1980-81	445 257	394 596	287 683	698 917		
1957-58	73 736	41 360	25 800	80 482	1981-82	532 364	432 599	318 147	759 111		
1958-59	75 218	44 828	27 600	84 924							

(a) Average of weekly figures.

(b) Commonwealth, trustee and private. Private savings commenced operations in Tasmania as follows: ANZ, September 1961; National, May 1962; CBA, July 1962; CBC, March 1963; and Bank of Adelaide, November 1970.

(c) Excludes debits to Government accounts at Hobart City branches.

Instalment Credit for Retail Sales, Tasmania (a)
(S'000)

Year	Amount financed during period (b)						Balances outstanding at end of period	
	Motor vehicles (c)		Household and personal goods		Total all goods		Type of business	
	Non-retail businesses	Retail businesses	Non-retail businesses	Retail businesses	Non-retail businesses	Retail businesses	Non-retail businesses	Retail businesses
1965-66	18 017	400		11 126		29 543	37 495	7 645
1966-67	19 025	422		11 160		30 607	38 777	7 050
1967-68	21 909	430		12 058		34 397	43 141	6 457
1968-69	21 001	821		13 751		35 573	44 205	6 826
1969-70	23 353	925		13 816		38 094	46 537	7 317
1970-71	25 485	1 215		13 705		40 405	50 453	7 293
1971-72	28 240	1 117		13 511		42 868	54 463	7 097
1972-73	32 695	616		14 579		47 890	60 860	6 497
	<i>Finance businesses</i>	<i>Other businesses</i>	<i>Finance businesses</i>	<i>Other businesses</i>	<i>Finance businesses</i>	<i>Other businesses</i>	<i>Finance businesses</i>	<i>Other businesses</i>
1973-74	32 278	457	3 394	5 489	35 672	5 946	51 512	5 621
1974-75	40 409	371	4 028	5 753	44 437	6 124	63 544	4 352
1975-76	45 612	282	6 819	5 752	52 431	6 034	78 038	4 371
1976-77	54 738	175	7 465	5 951	62 203	6 125	95 463	4 137
1977-78	54 967	—	6 163	5 063	61 130	5 063	104 029	3 117
1978-79	48 714	—	6 761	2 753	55 475	2 753	95 716	1 486
1979-80	39 814	—	7 116	1 048	46 930	1 048	86 164	1 495
1980-81	37 286	—	6 969	1 142	44 255	1 142	80 220	1 580
1981-82	35 388	—	8 873	1 661	44 261	1 661	79 132	2 072

(a) A break in continuity of the series occurs from 1973-74. The classification for the pre-1973-74 categories 'retail businesses' and 'non-retail businesses' differs from the subsequent categories 'finance businesses' and 'other businesses' mainly in the treatment of incorporated finance subsidiaries of retailers. These were formerly included in the category 'retail businesses' but are subsequently covered in 'finance businesses'.

(b) Includes time payment, budget account, and personal loan schemes associated primarily with financing of retail sales of goods. However, it excludes the hiring charges, interest and insurance costs associated with these types of contracts.

(c) Includes new and used cars, boats, caravans, trailers and motor parts and accessories but excludes commercial type vehicles.

Appendix B

CHRONOLOGY

The Year 1982

January

A 6.6 per cent increase in domestic airfares was announced by the Independent Air Faires Committee. The Winfield-TNT9 six day bike race at the St. Leonards Velodrome was won by Victorian Phil Sawyer and Shane Sutton of N.S.W. 50 pilot whales stranded in Macquarie Harbour for two days were freed. The Minister for Primary Industry, Dr Amos, announced that the Government had written off about \$2m of apple growers' debts to the Tasmanian Apple Marketing Authority (TAMA). A recommendation was made that the Seven Mile Beach protected area be developed as a leisure, sporting and holiday centre. A Tasmanian Fisheries Development Authority inspector requested an inquiry to investigate the reasons for low morale and resignations within the Authority. Launceston media group, Examiner Northern Television Ltd, acquired 40.1 per cent of the issued capital of TVT6. Burnie cheesemaker Lactos had a \$5m injection of funds from its French-based owners. Bushfires raged on Three Hammock Island off the North-West Coast. A \$6m plan for development of Devonport Airport was released. Shopkeepers acting as sub-agents for Tattersalls faced prosecution over the sale of Instant Lotto tickets. The South-West National Park, the Franklin-Lower Gordon Wild Rivers National Park and the Cradle Mt-Lake St Clair National Park were nominated by the Federal Government for the World Heritage List; the proposed dam on the Franklin River lies within the nominated area. Carbon dating confirmed that Kutikina Cave (Fraser Cave) on the Franklin River was first occupied in the last Ice Age, approximately 20 000 years ago. The Rt. Revd. John Vernon Cornish, Anglican Bishop-elect of Tasmania died suddenly on 26 February 1982. He had been elected to replace the retired Bishop R. Davies. An announcement was made that the Southern Metropolitan Planning Authority would cease to operate from 4 April. Sydney's *Powerful Prince* won the Hobart Cup. The Tasmanian Potato Industry Authority ceased operation after three years. The State Government voted for the Gordon-below-Franklin hydro electric scheme rather than the Gordon-above-Olga scheme as its official choice.

February

East-West Airlines began flights to the North-West Coast, taking over the 35 year service from TAA. The Brighton Municipality's own newspaper, the *Jordan River Journal*, was first produced. State Government lifted the interest level below which loans are exempt from the State Government's two per cent stamp duty. The Government's appointment of television environmentalist, Mr Harry Butler as its \$625-a-day consultant on conservation triggered a storm of protest. The head of the Hydro-Electric Commission, Mr Russell Ashton, had his term in the post extended for two years. Tasmanian Government decided to introduce insurance for tourists aimed at cushioning the effect of any future transport strikes. Tasmanian Lion's Clubs, in association with the Department of Health Services, The Education Department and municipal councils launched a statewide anti-rubella campaign aimed at school girls between 11 and 14 years of age. 32 000 State Government employees agreed to defer cost-of-living pay increases until July in an attempt to save the Government up to \$11m this financial year. North-West Coast farmers faced severe financial hardship as a result of the drought. A plague of grasshoppers on Flinders Island reached serious proportions — taking everything green with it — pastures, curtains, housepaint and even a pair of green underpants! Tasmania's first Local Government week was held from 22-28 February; its main aim was to encourage people to enrol with councils

as resident electors. A third herd of whales in three months beached on Tasmania's coast — this time between Stanley and Smithton. A group of Tasmanians formed a non-political organisation called Action Tasmania to promote economic development. It was announced that a Melbourne-based fish processing company is to establish operations on the Tamar River at Beauty Point. The Premier, Mr Holgate, and senior banking officials from the Bank of NSW and French international bank Societe Generale signed loan documents which will provide a total of \$20m from private sources for HEC and Rivers and Water Supply Commission projects. Series of fires throughout the state caused the death of a man at Elderslie. An army company was flown to Tasmania from Holsworthy (NSW) to relieve firefighters. A special state of emergency was recommended, the first time since the Emergency Services Act was proclaimed in 1976 that this power has been used. Mrs Mary Willey officially resigned from the ALP. The leader of the State Opposition, Mr Gray, announced that he had received assurance from the Prime Minister, Mr Fraser, that the Federal Government would not intervene to prevent Tasmanian loan funds being used to finance the Gordon-below-Franklin power scheme. Premier Holgate failed in his initial bid to get firm funding guidelines from the Commonwealth for the next power scheme. An announcement was made that TAA will take over the operation of the Hobart-Christchurch air link from Ansett who withdrew from the route on economic grounds. State Government announced tax concessions to industry. State Government released details of a proposed conversion of the Mount Nelson College of Advanced Education into a new State police headquarters. *Andrias* won the Winfield Launceston Cup. Rossarden Mines Ltd announced 130 retrenchments. Fingal CYSS group announced closure along with other CYSS centres at Latrobe, Circular Head and Westbury. A Brisbane engineering firm, Cameron McNamara and Partners Pty Ltd, will carry out an independent cost study of the Gordon-below-Franklin power scheme. An announcement was made that Hobart Matriculation College is to be closed in favour of Community Colleges at the Elizabeth Matriculation College site and at Claremont. Fire swept through the Rosetta Primary School causing \$1.25m damage.

March

It was disclosed that Tasmania's exports last year increased by more than four times the national average. Police divers searched South Cape Bay for the remains of a swimmer believed to have been taken by a white pointer shark. Mr Vic Hislop, a Brisbane shark hunter, led the search for the shark. 36 employees at Cleveland Tin Limited's mining operation at Luina were retrenched. A major review of State Government construction activities was announced to seek to eliminate duplication in various Government departments. An announcement was made that 100 workers would lose jobs at Burnie's APPM Ltd mill. World wool price record was broken at the Launceston Wool Sales. Macintosh power station became operational — the first stage of the \$540m Pieman River power development. The Government announced a decision to create a new department covering all aspects of land use management and development — Department of Urban Regional and Municipal Affairs. The Parliamentary Public Works Committee opposed the construction of a separate international airport terminal for Hobart. Tasmania was admitted to full Sheffield Shield status for the 82-83 cricket season. The Holgate Labor Government was defeated on a no confidence motion by a majority vote of the Liberal Opposition, two Labor defectors and a Democrat. Sir Stanley Burbury left the state for an extended holiday in Queensland after which time he retired. Tasmania's new Governor Sir James Plimsoll, was to take up the position in October.

April

Edgell carried out a feasibility study on the North-West Coast which could result in expansion at its Ulverstone factory. Plans for a new Bass Strait ferry to replace the Empress of Australia were presented to ANL by representatives of the Wartsila Shipping Company — Finland. Two reports, one an HEC analysis and the other by Brisbane engineering consultants, stated that the Gordon-below-Franklin hydro power would be cheaper than thermal power. Launceston textile firm, James Nelson Pty Ltd announced it may be forced to close which would lead to the retrenchment of 140 people. The Pioneer tin mine, operated by Umdex Mining Ltd, was closed, resulting in the retrenchment of

40 employees. Mrs Mary Ockerby, who at 106 was believed to be the oldest woman in Tasmania, died at the Ulverstone District Hospital. The 1982 State election attracted a record total of 127 candidates. Hobart and Launceston both recorded above average temperatures for the three summer months. Rt. Rev. Monsignor Bernard Rogers, Vicar-General of the Roman Catholic Church in Tasmania, died after a long battle with cancer. An announcement was made that 31 workers are to be retrenched from Risby Forest Industries sawmill. The Burnie Council withdrew from the North West Master Planning Authority. A decision was made to amalgamate two of the oldest church schools in Australia: Launceston Grammar and Broadland House. The HEC suspended its controversial publicity campaign for the duration of the state election. There was no central election advertising by political parties on television, radio or in newspapers during the 15 May State election campaign to comply with legal opinions on the Electoral Act.

May

Three attempts to establish an unofficial aboriginal 'consulate' on the lawns of Parliament House in Hobart were thwarted by police. Recommendations to the Federal Government by the Commonwealth Grants Commission required cutbacks in areas of police, education and health. A decision was made to upgrade Launceston airport. Australia's biggest tungsten producer, King Island Scheelite Ltd, retrenched employees and closed its operation for a month. Conservationists attacked a report by Mr Harry Butler which agreed with the development of National Parks provided there are strict environmental controls. The Launceston Federal Country Club Casino received its official gaming licence and opened for business. The election resulted in the Liberal Party forming a Government in its own right for the first time in Tasmania's history. Hobart's cut-price petrol war ended — more than 40 service station employees were retrenched during the price war. Wind gusts of up to 122 kmh caused widespread property damage and power failures throughout Hobart. An announcement was made that the Premier, Mr Holgate, would step down from the leadership of the Labor Party in favour of Mr Ken Wriedt. Real estate agent, Mr Hank Petrusma, won a closely contested ballot for the Legislative Council seat of Hobart. The new Premier, Mr Robin Gray, was sworn in by the Lieutenant Governor, Sir Guy Green. The new Liberal Government removed 60 contract staff from their posts. Mr Ken Wriedt was unanimously elected leader of the Labor party.

June

Tootal Australia employed 60 more people at its Devonport factory. State Government implemented two of its election promises: it authorised payment of a \$500 grant to employers for every new employee hired; and the present two per cent stamp duty on loans was abolished. A decision was made to expand the Ulverstone potato processing plant (operated by Edgell Birdseye) resulting in the creation of 100 jobs and demand for an extra 50 000 tonnes of potatoes per year. Hobart lost its bid for a multi-million dollar international hotel planned for Battery Point. Plans for statewide football competition for 1983 were scrapped. The ALP National Executive took control of the Tasmanian branch until at least March next year. The Premier, Mr Gray, announced that Tasmania would welcome any nuclear powered United States ships rejected by Victoria. The world's largest roll on-roll off general cargo ship, the *Lilloet* docked at Burnie for the first time. It appeared that this year's World Ploughing Championship to be held at Longford, is to be the first of its type to be held in Australia. The Prime Minister, Mr Fraser, officially opened the championships which took two years to plan and \$100 000 to stage. New Zealand sheep farmer, Mr Ian Miller, won the gold medal at the World Ploughing Championships. Legislation for the controversial \$453m Gordon-below-Franklin power scheme was passed by the House of Assembly. State Government announced it would sell the Government Printing Office to private enterprise (This decision was later revoked). The Tasmanian Wilderness Society challenged Federal Government's right to provide loan funds for the next power scheme through the High Court but failed. Legislation approving the Gordon-below-Franklin power scheme was finally passed through Parliament. An announcement was made that the salaries of public servants earning more than \$25 000 were to be frozen. A 40 page report produced by a committee of four Tasmanian businessmen predicted bankruptcy for the State unless government spending was curbed.

The NTFA decided to revert to its original six team roster next year, ending the two year experimental Greater Northern Football League. State Government requested Federal aid to help fund Tasmania's record deficit estimated at \$38m. The Risdon plant of Electrolytic Zinc Company announced a reduction in its workforce as a cost cutting measure. Tasmania's newest knight, Sir Donald von Bibra, was killed in a car accident only 12 days after the Queens Birthday Honours list was announced. Union delegates at EZ Co's Risdon Plant formed a seven point package aimed at heading off planned retrenchments. The State Government got the financial go ahead for the next power scheme and at the same time was freed of any Commonwealth involvement or control over its funding. The Minister for Health, Mr Cleary, announced increases in Tasmanian Public Hospital fees. A decision was made to fund the Tasmanian Film Corporation only until 30 September and then to either sell, lease or disband it.

July

Hobart's new patrol boat, HMAS *Ardent*, arrived after a three month re-fit in Queensland. HMAS *Ardent* is the first attack class patrol boat to be based in Hobart and replaces HMAS *Bass*. It was decided to replace the *Empress of Australia* with a \$50m luxury ferry by 1985. Dr Norm Sanders accused five Liberal members of overspending in the recent state election. 91 workers at the Risdon Plant of EZ were retrenched through natural wastage, retirement and voluntary retrenchment. Union members began a campaign for a 38 hour week at EZ's Rosebery plant. The EZ Co announced that 167 employees were to be retrenched at Rosebery. The Federal ALP Conference decided to oppose the construction of the Gordon-below-Franklin scheme. APPM shelved plans for expansion of its Wesley Vale plant. A \$1m contract was let to a Hobart firm for the construction of a international terminal building at Hobart airport. It was disclosed that Housing Division rents would rise by 10 per cent in two months. An increase in crude oil costs led to Tasmanian motorists paying 2.1 cents more per litre for petrol. The Premier, Mr Gray, announced that Devonport would remain the sea passenger terminal for Tasmania when the replacement vessel for the *Empress of Australia* comes into service. A decision was made to upgrade Hobart's airport terminal. Mr Haros called upon Dr Norm Sanders to resign over alleged breaches of the *Electoral Act*. Features of the Liberal Government's first budget were help for first home buyers and low income home buyers, relief from payroll tax and the abolition of death duties and tax on loans. Tasmanian Engineering Services Pty Ltd at Somerset went ahead with its plan to reduce the wages of its employees despite threats of union action. A further 15 men were retrenched from Branhholm Sawmills Pty Ltd. United Milk (Tas) successfully negotiated large export contracts for cocoa milk powder mixes with Japanese firms. An announcement that there is to be an expansion of Elders IXL Ltd's operations was made. Launceston recorded its lowest temperature for six years: minus 5°C. The loss of mainland markets for Tasmanian pallet timber forced a North-West timber mill to sack nine men and lose one of two sawmills. State Government announced a major effort to assist the private building sector in North and North-West Tasmania. Tasmania's public servants were asked to accept a total wage freeze or face retrenchments among their ranks. The Tasmanian Government Tourist Bureau achieved record sales for the 1981-82 financial year; an increase of 18.86 per cent on the previous year. It was announced that motorists would no longer have to produce drivers licences on demand. It was disclosed that multi-cultural television is to be extended to Hobart before 1985. Work began on the \$11.8m CSIRO Marine Laboratories at Castray Esplanade. State Government decided to introduce new measures to curb the mounting road toll. These included random breath testing and a reduction in the permissible blood alcohol level from .08 to .05. Premier Gray announced that police would act against conservationists who attempt to stop work on the Gordon-below-Franklin power scheme. Australia's inflation rate was the worst for the last five financial years (10.4 per cent). Hobart prices rose by 9.9 per cent in the 12 months to the end of June.

August

Beverley Buckingham was awarded the 1981-82 Tasmanian Jockeys premiership and in so doing she became the first woman to win a jockey's premiership in any Australian

state. The State Government approved a new film production program for the Tasmanian Film Corporation in order to keep the company as a going concern. 30 anti-dam protestors were escorted from the public gallery after a demonstration during debate on a government proclamation to revoke parts of the Wild Rivers National Park. The Mt Lyell copper mine at Queenstown announced it would close for two months and introduce a four-day week in an effort to avoid prolonged closure. A northern Tasmanian consortium of three companies, to be known as Allied Fisheries (Tasmania) Pty Ltd is to finance a \$7.2m combined boat-building, fishing, processing and marketing venture centred on Beauty Point. The venture is expected to provide 200 new jobs by June 1983. The Minister for Primary Industry announced that the Tasmanian Apple and Pear Marketing Authority (TAMA) would be disbanded early in 1983. The Federal Government rejected a request from the Premier, Mr Gray, to withdraw its nomination of the South-West wilderness for the World Heritage list. The Minister for Education, Mr Bingham, told a meeting of education students that the State's 344 final-year teacher studentship holders would not be guaranteed a job with the Education Department in 1983.

September

An economic and agricultural disaster was feared as more areas of the state were classified as drought areas. APPM announced that its Burnie mill had switched from oil to coal for its steam production in a move which was estimated to save the company several million dollars and provide employment in the mines of the Fingal Valley. An announcement was made that the Launceston textile manufacturer, James Nelson Pty Ltd. 24 eminent world scientists wrote to the Prime Minister expressing concern at the proposed hydro-dam in the South-West. The Hughes report on Education Department administration tabled in Parliament recommended substantial structural changes and staff reductions. 3 000 State Government employees rallied in Franklin Square to protest at Government policies towards its workforce. Tasmania had its largest ever contingent to the Australian representative side for the Commonwealth Games — nine members. The North-West Football Union announced its decision to revert to a nine-team roster in 1983. The Liberal Government's first State Budget was described as a 'jobs boost budget'. The Repco Bearing Co. in Launceston announced that due to a downturn in orders, the company had been forced to retrench 51 people. Scottsdale defeated Launceston for the NIFA Australian Rules Premiership, Cooe defeated Penguin in the NWFU grand final and New Norfolk defeated Glenorchy in the TFL grand final. The State Government announced its intention to build a \$7.5m high school at Exeter to replace the existing Exeter District High School. The Premier announced that Johnson and Johnson would open an alkaloid manufacturing plant at Westbury at the end of the year which would employ 15 people. The Minister for Sea Fisheries, Mr Beswick, announced that the Government had adopted recommendations for a \$7m development of Tasmania's fishing ports of St Helens, Stanley, Triabunna and Dover. The zoning system for State Government schools was abolished.

October

The Minister for Health, Mr Cleary, foreshadowed major legislative changes to the Poisons Act that would substantially increase penalties for drug offences and strengthen police powers of search and arrest. Associated Pulp and Paper Mills Ltd (APPM) retrenched 190 employees from its Burnie mill and revealed that a further 100 jobs were at risk. The Government's budget measure to abolish death duties passed the House of Assembly. The Australian Paper Manufacturers' (APM) Geeveston pulp-mill stopped production and closed with an expected loss of 350 jobs. It later had a month's reprieve from the State Government and decided to seek Federal assistance to avert the closure. The State Government committed \$3.9m to three sporting developments: a Lake Barrington rowing course, a baseball diamond at Kingston and the upgrading of the St Leonards velodrome.

November

The Government announced a \$3 per head sheep slaughter subsidy, and a mass slaughter of East Coast sheep was expected. 150 day-labour employees accepted

redundancy payments totalling a payout of \$1.7m. State Government launched a \$1m municipal employment scheme aimed at alleviating peaks in unemployment. Blazes raged through the south of the state in the wake of Hobart's hottest November day since 1937 (35.6°C). The Federal Labor Party announced a no-dams policy for a Federal Labor Government in a decision which split the part in the State. State cabinet announced its decision to keep the Government Printing Office. Winds gusting up to 113km buffeted southern Tasmania. The Ovaltine factory at Ulverstone announced a \$3.1m expansion plan. The Federal Government announced it would provide \$40 000 towards the development of an Octopus fishery off the North-West coast. Following arrests at cricket matches, the TCA announced a ban on spectators bringing liquor to the TCA ground. Unemployment reached a new peak level of 11.8% with 18 600 people looking for full-time work in Tasmania. Tasmania became the first state to declare support for the National Crimes Commission being set up by the Federal Government. North Broken Hill made a \$70m takeover bid for APPM. The Premier announced a Government housing scheme to inject \$5m into the building industry through low interest loans. State Government decided to prepare a \$3m minor works program to help curb unemployment. It was announced that Tasmanian police are to be given new powers in a bid to combat a blockade of dam site construction in the South-West by conservationists. Legislation reducing the permissible blood alcohol level for drivers from .08 to .05 was introduced to Parliament. State Government threatened to force APM out of the Huon permanently after the company announced a two year shutdown from Christmas eve. Australian National Line (ANL) announced that it would replace the *Empress of Australia* with two joint passenger-cargo vessels. The Premier, Mr Gray, rejected an offer by lawyers to oversee the proposed Wilderness Society blockade on dam work sites in the South-West in a bid to defuse possible violent situations. Premier Gray was accused of promoting a bloody conflict in the South-West by his moves to give police new powers of arrest. The Senate select committee on South-West Tasmania came out against building the dam and put further pressure on Federal Cabinet to intervene. The Attorney-General, Mr Bingham, announced that Tasmania had formally applied to have its opposition to World Heritage listing heard by the World Heritage Committee in Paris and announced that he would go to Paris to lobby the Committee. There was a recommendation for a single state public service which would result in 40 000 employees being united following a major re-vamp of Tasmania's public administration. An announcement was made that the Education Department is to be overhauled with changes to its management structure being implemented immediately. Federal Government approved the upgrading of the Wynyard aerodrome to medium jet standard at an estimated cost of \$8m. Tasmania Police Commissioner, Mr Max Robinson, attacked the planned conservationist blockade.

December

An announcement was made that Air New Zealand would begin a new Tasman service between Hobart and Christchurch. The Federated Engine Drivers and Fireman's Association's (FEDFA) confrontation with APPM's Burnie mill forced the closure of the plant for the second time in one week. Launceston's new Civic Square was opened by the Governor Sir James Plimsoll — it cost \$11m and took 14 years to complete. The Premier, Mr Gray, gained \$9m in extra Federal funds for the State. He was more optimistic that the Federal Government would not intervene in the dams issue and had an assurance that Federal police could be sent to Tasmania if the dam row caused a law and order problem. It was announced that Tasmania is to have random breath testing after the Legislative Council voted in support of it. Tasmania's devastating drought appeared to have been broken after heavy rains fell over much of the State. Federal Government announced it would not intervene in the construction of the Gordon-below-Franklin dam. Approximately 1 500 people marched through the streets of Queenstown in support of Premier Gray's policies and the damming of the Gordon River. Police began their first arrests of TSW blockaders on the Gordon River — five people were arrested near the HEC camp. Tasmania won the Sheffield Shield match against Queensland. The World Heritage Commission placed Tasmania's endangered South-West wilderness area on its list. Both conflicting parties, the State Government and TWS claimed a victory. A special sitting of the magistrates court in Queenstown remanded 47 people in custody after they had

been charged with trespassing on HEC property in the South-West. State Government announced a freeze on all Government services and charges for 6 months from 1 January. Union Bulkships may re-enter the Bass Strait cargo trade in competition to ANL. The State Government agreed to sell the Tasmanian Film Corporation to a Hobart Company, Hukot Adina Pty Ltd. The State Government made a \$500 000 loan to the Mt Lyell Mining Company at Queenstown to help offset low world copper prices. A \$6 000 feasibility study recommended that the Launceston Pacing Club move to either Carrick or Young Town. A fire at Longford Primary School caused an estimated \$100 000 worth of damage. The leader of the anti-dam movement, Dr Bob Brown, was sent to Risdon gaol awaiting trial for trespassing on HEC property. A total of 43 people were arrested, bringing the total to 196 during the four-day action. England defeated Tasmania by six wickets in cricket. In a rare display of solidarity Tasmanian politicians told Federal members to stay out of the South-West scheme controversy and let the State continue with the dam. This attack was made at a rally of approximately 2 000 in support of the dam. A government error caused a deferral in the implementation of the new breathlyser legislation. In the one day cricket match between Tasmania and England in Launceston, England passed the Tasmanian total and won with more than half its allocated 50 overs to spare. Australian Democrat Dr Norm Sanders resigned from House of Assembly to contest the Senate next year. An announcement was made that the Federal and State Governments will provide \$9.2m for a seven year conservation and development program at Port Arthur. Andrew Lohrey announced his decision to stand down as a member of the Labor shadow cabinet in State Parliament. Three crashes soured the opening day of the Coastal Christmas cycling and athletic carnivals at Latrobe. A Devonport man surrendered to police after a 7½ hour siege which began after he had attempted to blow himself and his family up with gelignite. Swiss Urs Freuler won the blue ribbon Latrobe Wheel. Australian Railway Union proposed a scenic round-Tasmania railway as an alternative to the Tasmanian Government's dam. Staff at Wrest Point casino considered strike action on New Years Eve in protest at the Federal Pacific Hotels plan to retrench up to 60 staff at its Wrest Point and Launceston hotel casinos. Glenn Ritchie won the \$1 100 Big M Devonport Gift. Tasmanian businessman Mr Harold Cuthbertson became a Knight Bachelor in Queen's New Years honours list. It was announced that Tasmania's inflation rate for the year was among the lowest in Australia (Tasmania's rate — 10.3 per cent, national rate — 11 per cent). The results of the yachting races were as follows: Melbourne-Devonport (slowest on record) line honours again went to *Jemima* and winner on handicap was *Damel*; Melbourne-Hobart line honours went to *Cut Loose* and the handicap winner was *Solandra*. The Sydney-Hobart race saw the most dramatic finish ever when *Condor of Bermuda* took line honours by three metres (seven seconds) from *Apollo*. The winner on handicap was *Scallywag*.

PUBLICATION OF TASMANIAN STATISTICS

HOW TO OBTAIN CURRENT PUBLICATIONS

General

The Tasmanian Office of the Australian Bureau of Statistics is located in the *Commonwealth Government Centre* at 188 Collins St., Hobart. Requests for statistical publications can be made by calling at this address; by phoning the Information Officer on Hobart 209 409; or by writing to the *Deputy Commonwealth Statistician*, G.P.O. Box 66A, Hobart 7001. Those requiring particular publications on a regular basis should ask to be placed on the publications mailing list.

Service to the public is not restricted to the distribution of publications. If no publication adequately covers the subject matter of the inquiry, then a special extraction of the data required may be undertaken if they are readily available from the basic records held in the office. The guide, *Catalogue of Publications* (1103.6), *Tasmanian Office*, 1983, includes descriptions of all Tasmanian Office publications together with a detailed subject index and is available free of charge.

Historical

Before the appointment of the first Government Statistician in Tasmania in 1867, statistics had been published in the official 'Blue Books' compiled by the Colonial Secretary during the period 1822-1855, and in volumes entitled *Statistics of Tasmania* after self-government was granted.

By the *Commonwealth and State Statistical Agreement Act* 1924, the Tasmanian Parliament ratified an agreement for the establishment of an office in Tasmania of the Australian Bureau of Statistics, such office to meet the statistical needs of the State Government; provision was made for the Deputy Commonwealth Statistician, a Federal Government officer, to hold, at the discretion of the State Government, the title of (State) Government Statistician. The first officer appointed in this way was L. F. Giblin, M.C., D.S.O., who had previously been the State Government Statistician. (It was not until the late 1950s that similar arrangements were made in the other Australian states.)

Statistics from 1804

In the Archives Office of Tasmania, the following series are available:

- (i) *Statistical Account of Van Diemen's Land or Tasmania*, 1804 to 1854 compiled by Hugh M. Hull (Office of the Colonial Secretary).
- (ii) Official 'Blue Books' for the period 1822-1855.
- (iii) *Statistics of Tasmania*—annual publications from 1856 to 1922-23.
- (iv) *Statistics of the State of Tasmania*—annual publications commencing 1923-24 and continuing to 1967-68. (Copies of these volumes are held at the University Library, the State Library in Hobart, the Public Library in Launceston and the Tasmanian Office of the Australian Bureau of Statistics.) Although the bound volume entitled *Statistics of the State of Tasmania* has been discontinued as from the 1967-68 issue, the component parts are still published as separate bulletins.

Copies of publications listed under (i), (iii) and (iv) above, are available for inspection at the Tasmanian Office of the Bureau.

Current Publications of the Tasmanian Office

The Tasmanian Office of the Australian Bureau of Statistics is engaged in a continuous publication program, the statistics appearing in either 'for sale' or 'not for sale' publications.

The 'not for sale' publications (publications available free of charge) can be further dissected into annual bulletins and press releases. The press releases are issued with a view to making the statistical information available as soon as possible after compilation. Bulletins contain greater detail than press releases, but because of time taken to compile and print are issued some time after the period to which they refer. The two principal 'for sale' publications issued by the Tasmanian Office of the Bureau are the *Tasmanian Year Book* and *Pocket Year Book of Tasmania*.

The following table lists all recent publications issued by the Tasmanian Office. A similar table is included on the back cover of each issue of the *Monthly Summary of Statistics* and all annual bulletins, showing the latest available issues and their dates of publication.

Publications of the Tasmanian Office of the Australian Bureau of Statistics (a)

Cat. No.	Publication
<i>General</i>	
1101.6	Index of Towns, Localities and Standard Area Codes <i>irr</i>
1103.6	Catalogue of Publications, Tasmanian Office <i>irr</i>
1301.6	Tasmanian Year Book (\$15.00; Posted, \$17.00 Tas, \$18.00 interstate) <i>a</i>
1302.6	Pocket Year Book of Tasmania (\$1.00; \$1.50 posted) <i>a</i>
1303.6	Monthly Summary of Statistics <i>m</i>
1304.6	Compendium of Local Government Area Statistics <i>irr</i>
1305.6	Tasmania at a Glance <i>a</i>
<i>Demography and Social</i>	
3101.6	Demography <i>a</i>
3201.6	Estimated Population of Local Government Areas in Tasmania <i>a</i>
3202.6	Population and Vital Statistics <i>q</i>
3301.6	Death, Causes of <i>a</i>
3302.6	Divorces <i>a</i>
4203.6	Tertiary Education <i>a</i>
4204.6	Government Schools <i>a</i>
4205.6	Non-government Schools <i>a</i>
4302.6	Mental Health Statistics <i>a</i>
4502.6	Court Statistics <i>a</i>
4503.6	Prison Statistics <i>a</i>
4504.6	Police Statistics <i>a</i>
<i>Trade and Finance</i>	
5401.6	Interstate Trade <i>a</i>
5501.6	Local Government Finance <i>a</i>
5603.6	Friendly Societies, Report on <i>a</i>
<i>Labour, Wages and Prices</i>	
6102.6	Labour Statistics <i>a</i>
6301.6	Industrial Accident Statistics <i>a</i> (\$1.00; \$1.70 posted)
6401.6	Prices and Price Indexes <i>a</i>
<i>Agriculture</i>	
7111.6	Principal Agricultural Commodities, (Preliminary) <i>a</i>
7221.6	Livestock and Livestock Products <i>a</i>
7321.6	Crops and Pastures <i>a</i>
7322.6	Fruit <i>a</i>
7411.6	Agricultural Land Use and Selected Inputs <i>a</i>
7501.6	Agricultural Commodities Produced, Value of <i>a</i>

continued next page

Publications of the Tasmanian Office of the Australian Bureau of Statistics (a)—continued

<i>Cat. No.</i>	<i>Publication</i>
<i>Manufacturing and Mining</i>	
8201.6	Census of Manufacturing Establishments, Summary of Operations by Industry Class <i>a</i> (\$1.70; \$2.20 posted)
8202.6	Census of Manufacturing Establishments, Details of Operations and Small Area Statistics <i>a</i>
8203.6	Sawmilling, Woodchipping, etc. Statistics <i>q</i>
8301.6	Miscellaneous Indicators of Production <i>m</i>
8401.6	Mining <i>a</i>
<i>Tourism, Retail Trade and Building</i>	
8603.6	Tourist Accommodation <i>q</i>
8622.6	Retail Establishments & Selected Service Establishments: Details of Operations by Industry Class <i>irr</i>
8623.6	Retail Establishments and Selected Service Establishments: Industry and Commodity Details for Statistical Retail Areas <i>irr</i>
8624.6	Retail Establishments and Selected Service Establishments: Hotels and Accommodation <i>irr</i>
8625.6	Retail Establishments and Selected Service Establishments: Commodity Sales and Service Takings <i>irr</i>
8626.6	Retail Establishments and Selected Service Establishments: Industry and Commodity Details by Size of Establishments <i>irr</i>
8701.6	Building and Related Statistics <i>a</i>
8702.6	Building Approvals <i>m</i>
8703.6	Building Activity <i>q</i>
8704.6	New Dwelling Commencements as Notified by Approving Authorities <i>q</i>
<i>Transport</i>	
9301.6	Motor Vehicle Registrations <i>m</i>
9302.6	Motor Vehicle Census <i>irr</i>
9401.6	Road Traffic Accidents Involving Casualties <i>q</i>
9402.6	Road Traffic Accidents Involving Casualties <i>a</i>

(a) Publications are free of charge unless a price is shown. The name of each publication is followed by a symbol indicating the frequency of publication as follows: *m* - monthly, *q* - quarterly, *a* - annual, *irr* - irregular.

TASMANIAN STATISTICS IN CENTRAL OFFICE PUBLICATIONS

Although publications of the Tasmanian Office of the Australian Bureau of Statistics make available statistics on many aspects of the State, there are some fields in which additional or more frequent information is available in publications of the Central Office.

How to Obtain Central Office Publications

Central Office priced publications may be bought direct from the *Australian Government Publications and Inquiry Centres* at 113 London Circuit, Canberra or 162 Macquarie St., Hobart, or from the Tasmanian Office of the Australian Bureau of Statistics. A standing order may be placed with the *Australian Government Publishing Service*, P.O. Box 84, Canberra, A.C.T. 2600, with whom a credit account may be arranged. In addition to publications for which a charge is made, there are other Central Office publications which may be obtained free of charge by 'phoning Canberra (062) 52 6627 or Hobart (002) 209 409 or by writing to Information Services, Australian Bureau of Statistics, P.O. Box 10, Belconnen, A.C.T. 2616.

Subject Matter of Central Office Publications

The fields of statistical inquiry covered in Central Office publications are very wide (about 270 different titles are issued annually) and the best way to obtain a guide to the material available is to write to: *The Australian Statistician*, P.O. Box 10, Belconnen, A.C.T. 2616 and ask for the booklet *Catalogue of Publications* (1101.0). Copies of this guide are also available at the Tasmanian Office of the Bureau. This free, comprehensive guide lists the publications of the Central Office and of the state offices; in addition, it contains a subject index to information covered by Central Office publications. Readers with interest in a particular field are invited to call at, or write to, the Tasmanian Office which is in a position to give advice on what publications are available.

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Special articles are indexed to broad subject areas rather than to detailed items; e.g. those of an historical nature are indexed under the entry 'Historical Articles'. The index covers all *Year Books* up to and including this edition.

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